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ABSTRACT

This second volume of the statewide plan contains reports on: (1) postsecondary student enrollments, focusing on historical trends and demographic projections, enrollment projections, projection assumptions, and implications; (2) participation of minority students at the undergraduate level, participation of minorities and women in underrepresented fields of study, and participation in postsecondary education by persons with disabilities; (3) analysis of faculty supply and demand, faculty shortages, potential shortages, minority faculty, and women faculty; and (4) the need for a tuition policy ensuring access to the public college system, and the implications of the substantial growth in student aid that independent colleges provide from their own funds. The volume also reports the status of the actions and recommendtations proposed in the 1984 Plan and summarizes the master plans of each of the four sectors of higher education in New York State (state universities, city universities, independent institutions, and proprietary institutions). An appendix discusses Educational Opportunity Centers which serve educationally and economically disadvantaged students at the postsecondary level. A second appendix lists master plan amendments approved by the Regents, 1986-1988. A total of 49 tables and nine figures provide data to support the planning document. (JDD)

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# THE REGENTS STATEWIDE PLAN FOR THE DEVELOPMENT OF POSTSECONDARY EDUCATION IN NEW YORK STATE 1988

## VOLUME II

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THE STATE EDUCATION DEPARTMENT
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# THE REGENTS STATEWIDE PLAN FOR THE DEVELOPMENT OF POSTSECONDARY EDUCATION IN NEW YORK STATE 1988

## VOLUME II

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Albany, New York
October 1988

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# THE REGENTS STATEWIDE PLAN FOR THE DEVELOPMENT OF POSTSECONDARY EDUCATION IN NEW YORK STATE 1988

## VOLUME II

This Plan is in two volumes. In Volume I, the Regents set forth the actions they urge New York's colleges and universities to take, the actions they and the Education Department will undertake, and their recommendations to the Governor and the Legislature that address the four issues around which the 1988 Plan is organized. This volume contains reports on several topics related to these issues: enrollments, participation of underrepresented populations, faculty, and tuition rates. It also reports the status of the actions and recommendations in the 1984 Plan. Finally, it summarizes the master plans of each of the four sectors of higher education in New York State.



9

# I
# FUTURE COLLEGE ENROLLMENT

## Introduction

During the 1970's and early 1980's, New York and the nation experienced dramatic changes. The U.S. economy became more international; American industry faced increased competition from abroad. Population shifts within the United States meant that the northeastern states lost both industry and population to the sunbelt states.

New York State was not immune to these national trends. During this period New York's population declined while that of southern and southwestern states grew. The State's population declined from 18.2 million in 1970 to 17.6 million by 1980, a drop of almost four percent. New York, the largest state in the nation in 1960, is now second to California, and Texas is expected soon to be larger.

Not only did the State's population decline, it also became older. In 1970, New York had 1.96 million individuals aged 65 or older. By 1980 that number had risen to 2.16 million, a gain of ten percent. The number of live births in 1970 was 317,153 compared with 239,003 in 1980, a 25 percent decline. Enrollment in elementary and secondary schools dropped from 4.0 million pupils in 1970 to 3.44 million in 1980, a 14 percent decline. Furthermore, projections of elementary and secondary students and the number of high school graduates show that the decline will continue well into the 1990's.[1]

The importance of such national and State trends, particularly the population trends, was not lost on higher education policy makers and college administrators. Throughout the 1970's, institutional and State policy makers were concerned that the decline in the nation's younger population would lead to a substantial decline in postsecondary enrollment.[2] But enrollments in postsecondary institutions did not follow the substantial decline experienced in elementary and secondary school populations. In fact, in both New York and the nation as a whole, enrollment in postsecondary institutions continued to grow into the early 1980's despite the decline in the number of 18-to-24-year-olds and in the number of high school graduates. Only after 1983 did enrollments in postsecondary institutions begin to decline. The magnitude of that decline was more modest than had been previously expected.

This unexpected situation was due in large part to a growth, both nationally and in New York, in the percentage of young people continuing their education beyond high school. It also was the result of initiatives taken by New York's postsecondary institutions to increase access to nontraditional populations of students and of institutional efforts to increase the retention of all students.

Not only have past enrollments in postsecondary institutions not declined as expected, a number of recent events strongly suggest that future enrollments in postsecondary institutions within New York State will be higher than had been anticipated. Undoubtedly, the factor which will have the largest impact on future postsecondary enrollments is the priority given to efforts to reduce New York's high school dropout rates by the Regents, the Governor, and the Legislature. For example, the Liberty Scholarship and Liberty Partnership Programs not only should increase the number of high school graduates, but also, by virtue of their scholarship components, lead to increased college enrollments.

Dropout rates have decreased already. In New York City, the annual dropout rate for grades 9 through 12 declined from 13.7 to 8.3 percent between 1982-83 and 1985-86 (Figure 1, page 2). In public schools in New York State with over 50 percent minority enrollment, the dropout rate decreased from 15.2 to 8.7 percent between 1982-83 and 1985-86. Schools with less than 50 percent minority enrollment experienced a more modest decline in their dropout rates (from 3.8 to 3.3 percent during this period). This significant educational improvement for minorities is apparent nationally as well as in New York. According to the U.S. Census Bureau, the percentage of black young adults between the ages of 18 and 21 who are high school dropouts decreased from 27 percent in 1975 to 17 percent in 1985.

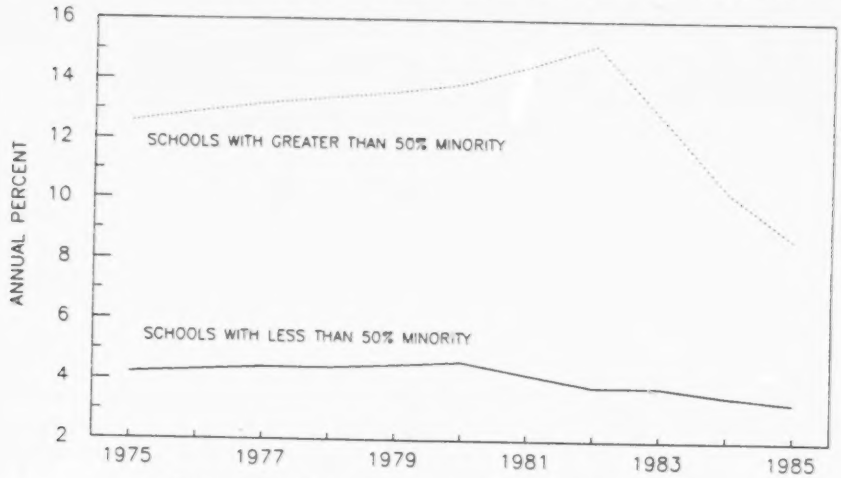
[1] State Education Department, "Projections of Public and Nonpublic School Enrollment and High School Graduates to 1994-95" (Albany, New York, August 1985).

[2] United States Department of Education, Office of Educational Research and Improvement, *Growth in Higher Education Enrollment: 1978 to 1985* (Washington, D.C.).

[3] Ibid.

**FIGURE 1**

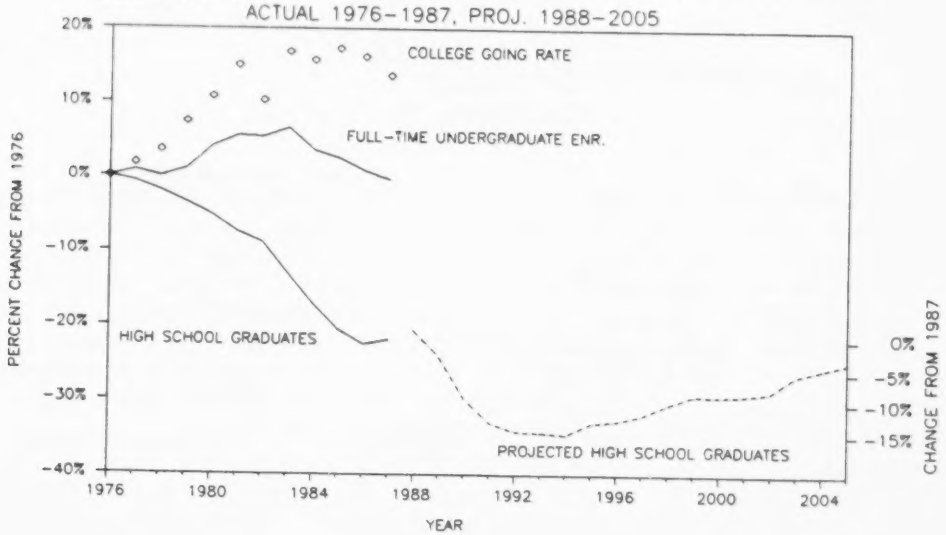
NEW YORK STATE
TRENDS IN HIGH SCHOOL DROPOUT RATES




* Dropout rate is defined as total dropouts divided by total enrollment in grades 9–12 for a given school year.

**FIGURE 2**

NYS:TRENDS IN HIGH SCHOOL GRADUATES, ENROLLMENT AND COLLEGE GOING RATE
ACTUAL 1976–1987, PROJ. 1988–2005



## Development of the 1988 Regents Enrollment Projections

In the 1984 Statewide Plan, the Regents said that the Department would consult with the sectors in developing the 1988 postsecondary enrollment projections. To implement that statement, the Department formed an Enrollment Projections Advisory Committee consisting of representatives of each of the sectors. This Committee met for over a year to review the assumptions contained in past Department enrollment projection models. A common topic of discussion at these meetings was the need to base enrollment projections not only on past trends but also on major State and institutional initiatives that could affect future enrollments substantially. Basic to those discussions was an assumption that educational initiatives, such as the Regents Action Plan and the Governor's Liberty Scholarship proposal, should be taken into consideration when developing postsecondary enrollment projections. The Committee also recognized the effectiveness of institutions' recent efforts and continued commitment to increase both access and retention. The positive effect of these efforts on postsecondary enrollments needed to be included in the Department's projection model.

In general, the Committee's recommendations focused on increases in the following four factors which affect future enrollment projections: (1) participation rates, (2) retention rates, (3) high school graduation rates and the number of future high school graduates, and (4) changes in the number of out-of-state and foreign students entering New York's postsecondary institutions. These factors were built explicitly into this Plan's enrollment projections and are described more fully later in this chapter. The projected enrollments that result show approximately a seven percent decline in full-time equivalent enrollment (FTE) between 1987 and 1994, followed by a four percent growth in enrollments between 1995 and 2004 (the end point for the projections).

## Historical Trends and Demographic Projections

Fully 80 percent of entering freshman college students in New York are recent high school graduates. Changes in this population, therefore, can affect substantially the size and composition of enrollments in postsecondary institutions. As Figure 2 and Table 1 (page 13) indicate, the number of New York high school graduates has been declining since 1976. Between 1976 and 1987, it declined 21.9 percent, from 248,758 to 194,246. The decline has been sharpest in recent years: almost 18 percent between 1980 and 1987. As the figure shows, after this next year the decline in the number of high school graduates is expected to continue until 1994; then that number is expected to begin to increase until at least 2005. By 1994, the number of high school graduates is projected to be about 15 percent lower than the 1987 level. Between 1994 and the year 2005, however, the number of high school graduates is expected to increase by approximately ten percent.

Figure 2 reveals also that, although the number of New York State high school graduates has declined sharply, full-time undergraduate enrollments actually continued to increase into the early 1980's. Between 1976 and 1983, the number of high school graduates declined by about 13 percent while full-time undergraduate enrollment increased by a little over four percent and full-time, first-time undergraduate enrollment increased by about one percent. The explanation for the differences in the trends for high school graduates and college enrollments lies largely in the increasing percentage of high school graduates going to college. In recent years, fully 74 percent of New York State high school graduates have entered postsecondary education the fall after graduation (Figure 3, page 4). About 52 percent have entered college in New York State as full-time undergraduates, and another three percent on a part-time basis. Table 1 shows that full-time participation rates for New York high school graduates attending New York postsecondary institutions increased dramatically between 1976 and 1985, growing by eight percentage points or almost 18 percent (from 44.5 percent of high school graduates in 1976 to 52.3 percent in 1985: 8/44.5 = 18 percent). Another 14 percent of New York high school graduates enter colleges outside the State. This rate has been quite stable over the last ten years.

The increase in college-going rates can be attributed to the changing social/demographic characteristics of the State, the increasing value placed upon obtaining a college education in an increasingly technological society, recent periods of unstable employment conditions, and expanded recruitment efforts by postsecondary institutions. Figure 4 (page 4) shows one sociocultural change: the dramatic growth in the college-going rate of women since 1972. In 1972, the percentage of New York female high school graduates going on to college within the State was about 48 percent; by 1987 that rate had risen to about 65 percent. Looked at in another way, in 1972 the college-going rate of male high school graduates was about ten percent higher than that of female high school graduates. By 1987, that relationship had become reversed, with seven percent more females than males going on to college

A shift in the composition of the State's population also has been important. New York's minority population has grown substantially in the past 25 years, while both the percentage and absolute size of the State's non-minority population has continued to decline. Between 1960 and 1980, the number of minority residents in the State (non-whites) increased by 133 percent, from 1.5 million in 1960 to 3.5 million in 1980. Minorities represented nine percent

**FIGURE 3**

## NYS: ACTIVITIES OF HIGH SCHOOL GRADUATES THE FALL AFTER GRADUATION

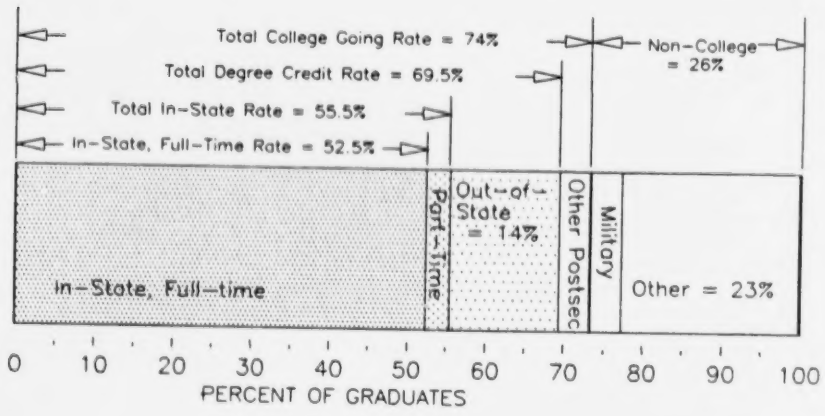



**FIGURE 4**

## NEW YORK STATE

IN-STATE COLLEGE PARTICIPATION BY GENDER

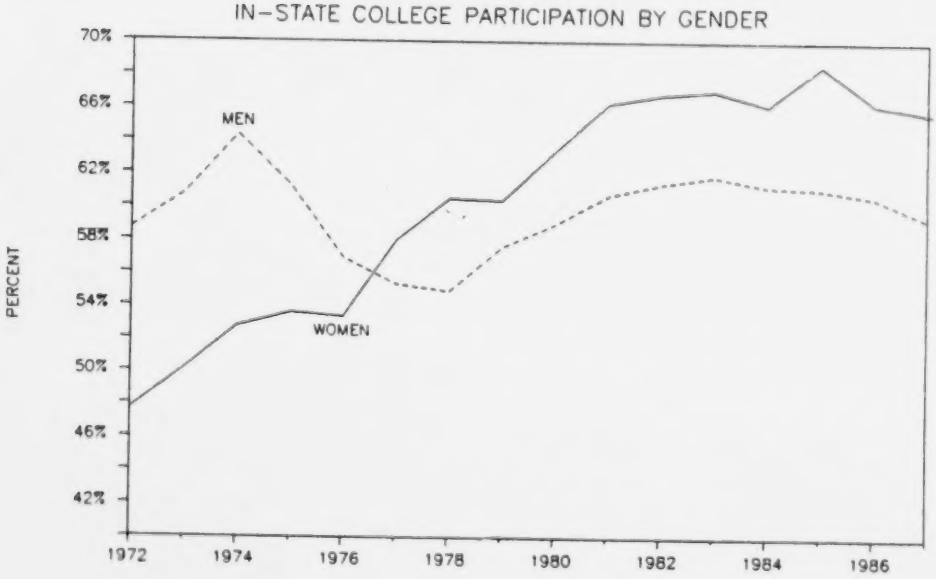


**FIGURE 5**

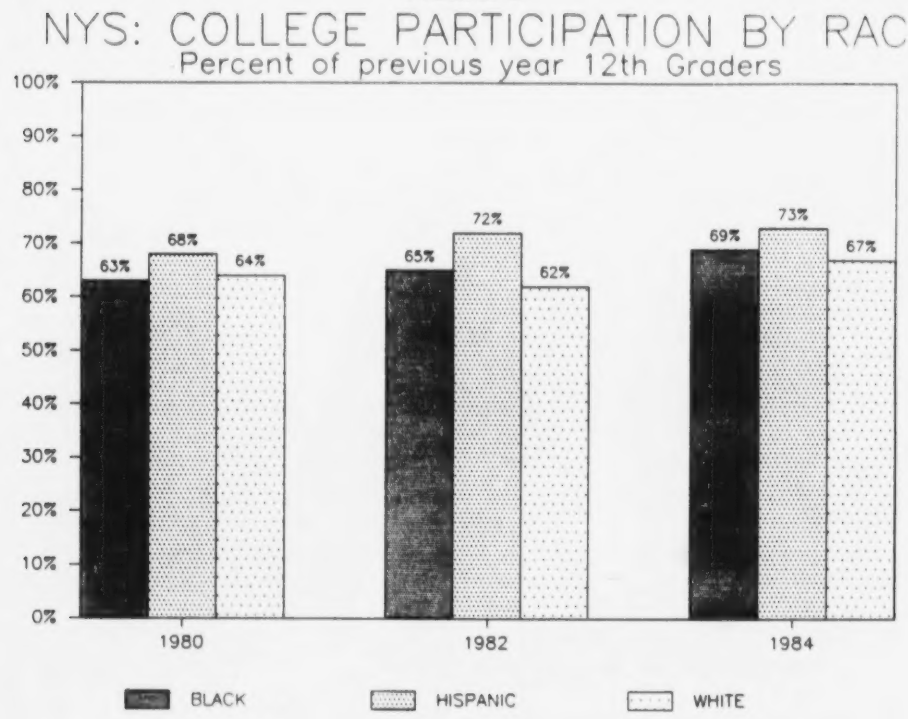
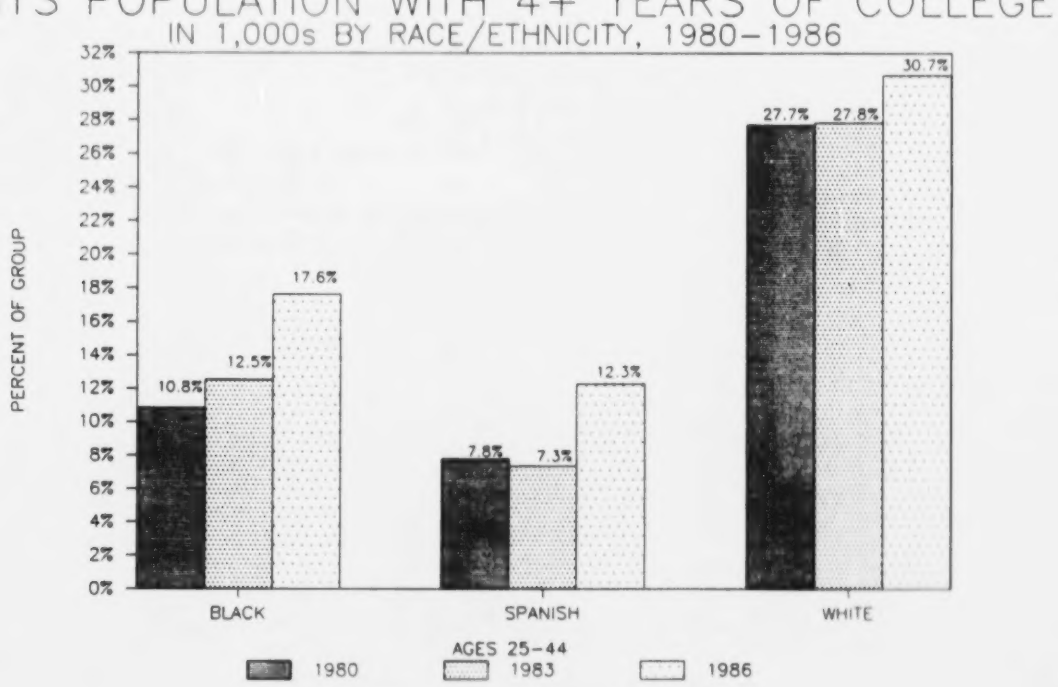



**FIGURE 6**



of the State's population in 1960 and 20.1 percent by 1980. During that period the State's white population declined from 15.3 million to 14 million (−8.5 percent). This changing population pattern is projected to continue into the 21st Century. According to Richard Alba and Katherine Trent, it is likely that by the year 2000 minorities will represent one-third of the State's population.

This shift in the general population has been reflected in shifts in the racial-ethnic composition of elementary and secondary school enrollments in New York State. Table 2 (page 14) shows that total enrollment in elementary and secondary schools in New York declined from 3.5 million students in 1970-71 to 2.9 million in 1980-81 and to 2.6 million in 1986-87, almost 27 percent. Between 1970-71 and 1986-87, the total minority enrollment grew by 8.5 percent, while white enrollment declined by almost 39 percent. In 1970-71, minority students accounted for 25 percent of the total elementary and secondary enrollments; they represented 37.5 percent in 1986-87.

As indicated in the introduction to this chapter, there have been substantial reductions in the minority high school dropout rates in both the State and the nation. Nationally, the dropout rate for blacks aged 18 to 21 declined from 27 percent in 1975 to 17 percent in 1985. Table 3 (page 15) shows that minority populations have experienced significant educational attainment gains within New York State. In 1980, almost 30 percent of the State's black population between the ages of 25 and 44 had fewer than 12 years of education; by 1986, the percentage had dropped to 22.5 percent. During that period, the percentage of the State's black population within that age group who had one or more years of college education increased from 30.5 percent to 42.4 percent. Similar patterns were evidenced by the State's Hispanic population. Finally, although a clear growth occurred between 1980 and 1986 for all groups in the number and percent of the State's population with four or more years of college education, gains for New York's minority population were most pronounced (Figure 5, page 5). Despite this, Table 3 indicates that the educational attainment of the State's minority population is still too low.

While the recent Census Bureau report indicates that educational attainment for minorities aged 25 to 44 has improved in recent years, a recent report from the American Council of Education's Commission on Minority Participation in Education and American Life indicates that the educational progress experienced by American minorities in the late 1970's may have slowed or reversed in recent years:

> The percentage of black high school graduates under 25 years old who had attended college rose from 39 to 48 percent between 1970 and 1975, but it dropped back to 44 percent between 1975 and 1985. College attendance rates for Hispanic youths also declined slightly in that decade, from 51 to 47 percent.[5]

Progress in educational attainment and college participation appears to be better in New York State than in the rest of the nation, although recent Higher Education Data System reporting problems cloud the issue somewhat. Within New York, although high school completion rates for minorities still lag behind those of non-minority students, once a student graduates from high school the likelihood that he or she will go on to college is about the same regardless of racial or ethnic origin. Figure 6 (page 5) shows college-going rates by race/ethnicity for high school seniors. Black and Hispanic high school seniors go on to college in-state at about the same rate as do white high school seniors. Note that between 1980 and 1984, college-going rates increased for all three racial/ethnic groups. Unfortunately, data reporting problems for 1986-87 prevented calculation of college-going rates by racial/ethnic origin for the 1986-87 academic year.

During the period of this Plan, State policy makers and postsecondary institutions need to monitor carefully whether new State policies and fiscal commitments for elementary and secondary education—the Regents Action Plan to Improve Elementary and Secondary Education Results and the Comprehensive School Improvement Plan, including the public identification of those schools most in need of improvement—have a substantial effect on college participation and retention. At the same time, New York State has provided substantial revenues to address the needs of students who are educationally and economically disadvantaged and who attend "poorer" schools. These efforts are likely to increase the number of students who pursue postsecondary education. If the increase proves to be substantial, it could affect enrollment significantly. Therefore, the Regents will ask colleges and universities to report any changes in enrollment they perceive to be attributable to changes in State policies for elementary and secondary schools as part of their 1990 progress reports and their 1992 master plans.

Minority enrollment in New York's postsecondary institutions has grown in recent years. Table 4 (page 14) shows that total enrollment in New York's postsecondary institutions was basically the same in 1986-87 as it was in 1980-81. During that time, however, enrollment of white students declined by four percent while minority enrollment (black, Hispanic, and native American) grew by 9.8 percent.

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[4] New York State Project 2000: Report on Population, (Center for Social and Demographic Analysis, State University of New York at Albany, Nelson A. Rockefeller Institute of Government, Albany, New York, 1986).

[5] *One-Third of a Nation* (American Council on Education and Education Commission of the States, May 1988) p. 11.

## Enrollments

Total enrollment[6] in the higher education institutions of The University of the State of New York grew by almost 235,000 students between 1970 and 1983; from 764,000 to almost one million (a 31 percent increase). Since 1983-84, enrollments have been declining, dropping by three percent to 970,000 students in 1987-88. Full-time undergraduate enrollment also peaked in 1983-84 at 573,000 students, up 30 percent from 440,000 in 1970. Between 1983-84 and 1987-88, full-time undergraduate enrollment declined by almost 37,000 students, or 6.5 percent. Table 5 (page 16) provides total undergraduate enrollment trends between 1980 and 1987.

Although the decline in total enrollments between 1983 and 1987 was more modest than expected, the decline in full-time, first-time enrollments has been significant. These enrollments peaked at 164,956 in 1981. By 1987, full-time, first-time enrollments were down to 141,485, a 14.2 percent decline. Additionally, this 14 percent decline represents a statewide average that masks substantial variation across institutions. Some institutions experienced no decline during this period while others experienced much more substantial declines in enrollment.

Part of the reason for the lack of a sharp decline in post-secondary enrollments is rising college retention rates. As colleges have faced declining enrollments and a declining population pool from which to draw students, they have increased both their recruitment and their retention efforts (see the Regents 1986 Progress Report). Table 1 shows that the freshman-to-sophomore level of retention increased by 22 percent between 1980 and 1987 at two-year institutions and by three percent at four-year institutions. Statewide, an increase of two percent also occurred for retention between lower-division (freshman and sophomore) and upper-division (junior and senior) enrollment.

## Projection Assumptions

Over the past ten years, the Department's computer projection model, under the guidance of a technical advisory committee representing the institutions, the sectors, and the Division of the Budget, has evolved into a complex and sensitive algorithm. Institutional differences in retention and in participation by geographical region and age group are incorporated directly into the model. A description of the model may be obtained from the Office of Postsecondary Policy Analysis.

As indicated in the introduction to this chapter, for over a year the Department has worked closely with the sectors to develop appropriate assumptions for the 1988 Statewide Plan's enrollment projections. Those assumptions are described below.

The New York State Department of Economic Development 1985 population projections by age group and region were used to develop the enrollment projections, along with projections of high school graduates released in December 1987 by the Education Department's Information Center on Education (Table 6, page 17). The high school graduate projections have been increased by an average of two percent statewide to reflect statewide efforts to reduce high school dropouts. Adjustments made to the Information Center's high school graduate projections are based on an assumption that the difference between the high school completion rates for minorities and non-minorities would decrease over the next five years. Regional increases will be greatest for New York City (with the largest elementary and secondary minority enrollments) and less for upstate regions. All increases assumed in the model are phased in over the five-year period between 1988 and 1992 and held constant thereafter.

The model assumes that rates of high school graduates' participation as full-time, first-time students will increase by two percent between 1988 and 1992 in all regions of the State. Corresponding participation rates for individuals aged 20 to 29 are assumed to increase by one percent, and for individuals age 30 and over by two percent. Part-time undergraduate participation rates were also assumed to increase by two percent over the five-year period for all in-state regions and age groups. The model assumes that recent participation rates for graduate enrollment will continue unchanged.

Full-time, first-time enrollment of out-of-state students has been growing even though the number of non-New York State high school graduates has declined in recent years. The 1988 enrollment projection model assumes a ten percent increase in the rate of enrollment for these students over the next five years. No increases are assumed for the participation rates of part-time and graduate out-of-state students. Recent historical rates of foreign student enrollment are assumed to continue unchanged into the future for all enrollment categories.

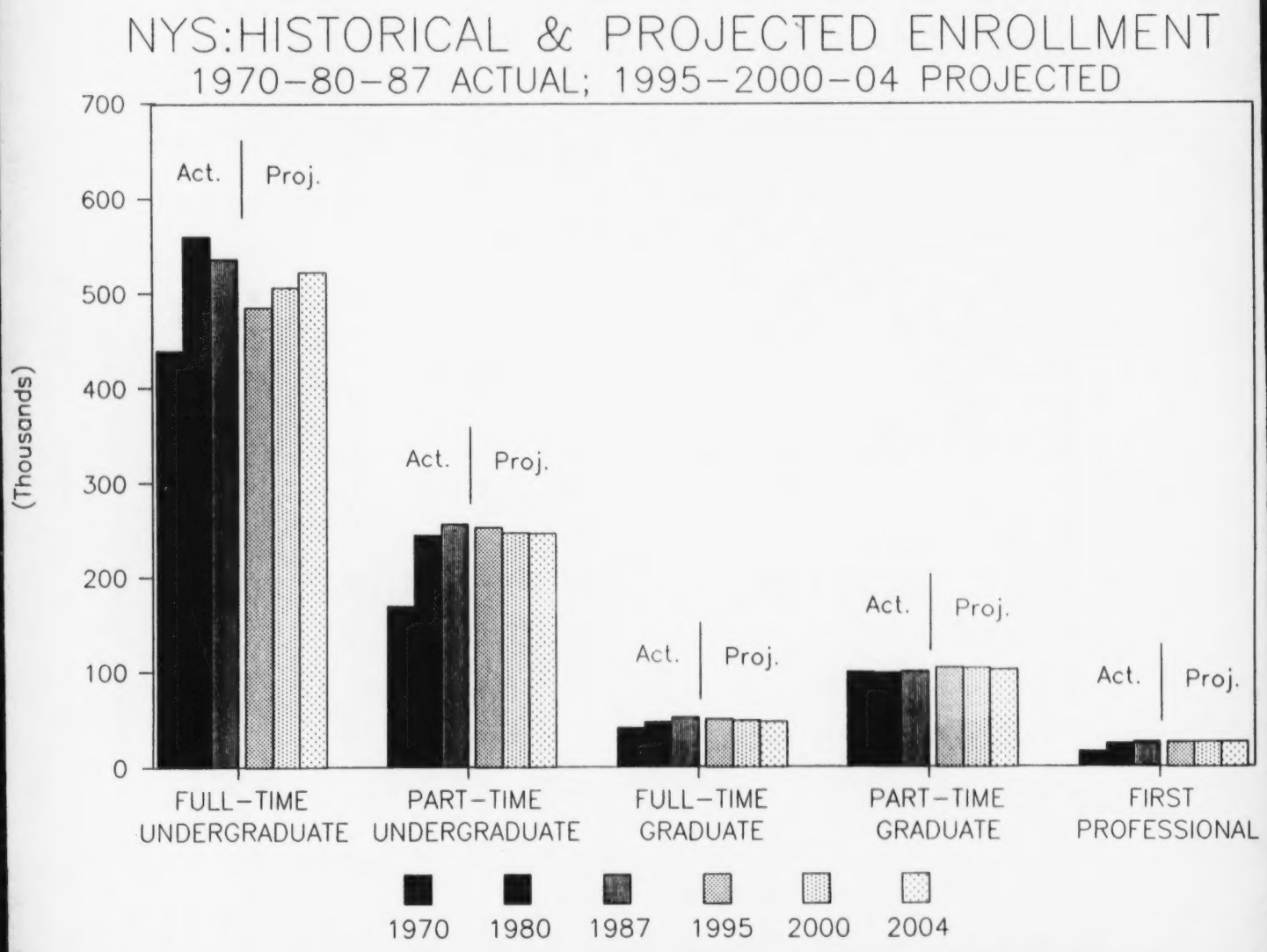
The attention institutions have given recently to improving retention rates also is expected to continue over the next five years. The model assumes that flow rates between the freshman and sophomore years will increase by 1.5 percent at four-year institutions and by 2.5 percent at two-year institutions. Flow rates between lower- and upper-division enrollment levels are assumed to increase by two percent at four-year institutions in all sectors.

## Projections

We project enrollment declines to continue over the next 17 years for all enrollment categories except first-professional and part-time graduate enrollments (Table 7,

[6] All enrollment data and projections exclude the Regents College Degree Program.

**FIGURE 7**


NYS:HISTORICAL & PROJECTED ENROLLMENT
1970–80–87 ACTUAL; 1995–2000–04 PROJECTED
(Thousands)
700
600
500
400
300
200
100
0
Act.
Proj.
FULL–TIME UNDERGRADUATE
PART–TIME UNDERGRADUATE
FULL–TIME GRADUATE
PART–TIME GRADUATE
FIRST PROFESSIONAL
1970
1980
1987
1995
2000
2004

page 18, and Figure 7). Full-time undergraduates are projected to decline by 52,000 students (ten percent) between 1987 and 1994, part-time undergraduates by 2,350 students (six percent), and full-time graduate students by 1,450 (three percent) due to continued declines in the younger adult age groups. After 1994, the number of full-time undergraduates is projected to rise gradually, while enrollments for all other categories remain quite stable. The stability projected for part-time and graduate enrollments will buffer the declines in full-time undergraduates for some institutions. We project total headcount enrollment, statewide (969,470), to decline by 60,000 (six percent) between 1987 and 1995 and then to increase by 35,000 by the year 2004. Overall, the change between 1987 and 2004 will be only three percent if these assumptions hold for the entire period.

The decline will be slightly greater for full-time equivalent (FTE) enrollment than for total headcount enrollment, with an eight percent decline projected between 1987 and 1996 (Table 7, page 18, and Figure 8, page 10). After the decline in FTE enrollment between 1987 and 1996, enrollment is projected to continue increasing until at least the year 2004. By that time, the FTE enrollment increase will have offset much of the earlier decline, resulting in an overall decline of three percent from current levels. At its lowest projected level, FTE enrollment is still expected to be 85,000 (14 percent) above the 1970 level.

The projections vary substantially by region and type of institution, primarily because of differences in demographic projections between New York City and the rest of the State. In New York City, full-time undergraduates are projected to increase one percent between 1987 and 1994 and another six percent between 1994 and 2004 (Figure 9, page 11, and Table 8, page 19). At the other extreme, institutions in the Regents Western region are projected to experience a 26 percent decline by 1994 and to remain basically at that level through 2004. Between 1980 and 1994, full-time undergraduate declines are expected to total 33 percent for the Western Region, 30 percent for the Northern Region, 22 percent for Long Island, and 19 percent for the Mid-Hudson Region. For many institutions, projected declines will be in addition to declines they have recently experienced.

The projections also vary by type of institution, due both to geographic location and to the unique clienteles and drawing power of different institutions. City University senior colleges experienced the largest full-time undergraduate declines between 1980 and 1987, but they are also the only type of institution with increases projected through both 1994 and 2004. This results from favorable population trends in New York City and from the increase in the minority portion of the City's high school graduates – a group that frequently attends City University. In contrast, both State University and independent four-year institutions, which experienced only a small decline in their enrollments in recent years, are projected to decline 12 to 13 percent by 1994 and then to recover their enrollments partially, with increases between five and seven percent by 2004. Enrollments in two-year institutions outside New York City are projected to decline by seven to 14 percent between 1987 and 1994 and then generally to rise gradually through 2004 by between four and eight percent. City University community colleges may experience less than a three percent enrollment change throughout the projection period.

Institutions with substantial numbers of part-time and graduate students will experience much less change for those categories of their enrollment. The largest changes are expected for full-time graduate enrollments after 1994. Full-time graduate students come largely from the younger adult pools. Trends in those population pools should lead to a six percent decline in full-time graduate enrollment between 1994 and 2004.

## Implications

Events and activities now under way appear sufficient to produce the projected enrollment levels unless economic conditions change enough to alter participation patterns once again. We assume, however, that the State is and should be encouraging increased participation by young adults from low-income, minority, and single-parent families, or more generally the highest-risk groups. Retention improvement in both our high schools and our colleges is a major part of this effort. The Regents believe that the societal and individual benefits of such improvement are well worth a considerable investment of resources. Improved college retention appears to hinge not so much on the fiscal resources available to institutions and students as on sound programs and on institutional strategies to encourage sound entry choices followed by integration and retention within colleges. The diversity of students and missions at the 250 colleges in New York State calls for individualized approaches to this challenge. A concerted effort in this area potentially could increase enrollment more than we have assumed for these projections.

The sharp dip in enrollments expected between 1990 and 1994 is a key concern for State planning. Since the decline will be followed by enrollment increases, many institutions should plan to maintain structures and capacities in anticipation of enrollments near current levels in the late 1990's. Due to competition among colleges, the decline through 1994 will be much greater for some institutions than for others. For institutions experiencing fiscal distress, *any* decline in enrollments is, of course, a matter of extreme concern. For these institutions, close monitoring of enrollments on a year-to-year basis is critical. State funding in the public sector should incorporate resources to bridge this period of stress. Similarly, student-aid funding should

**FIGURE 8**

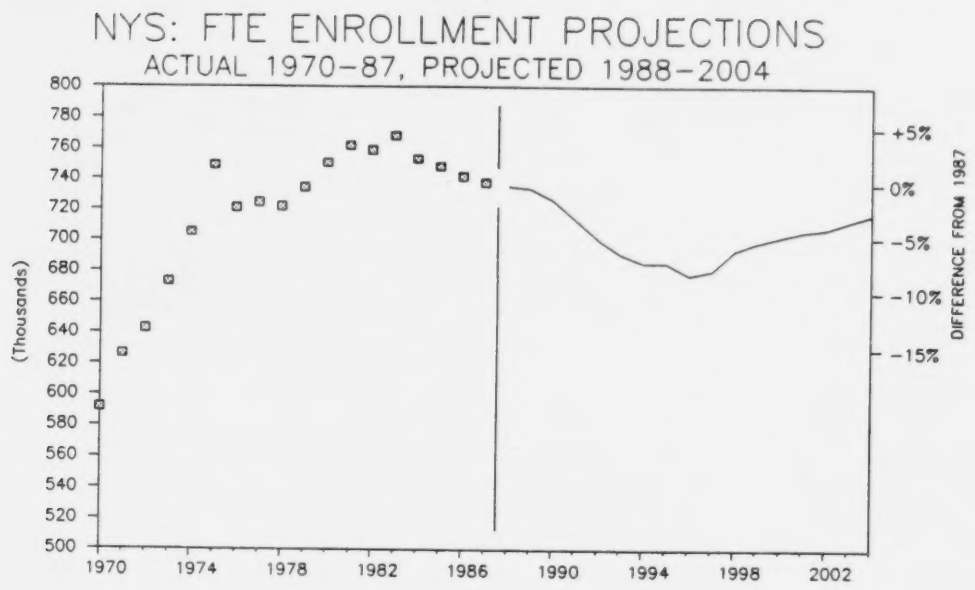
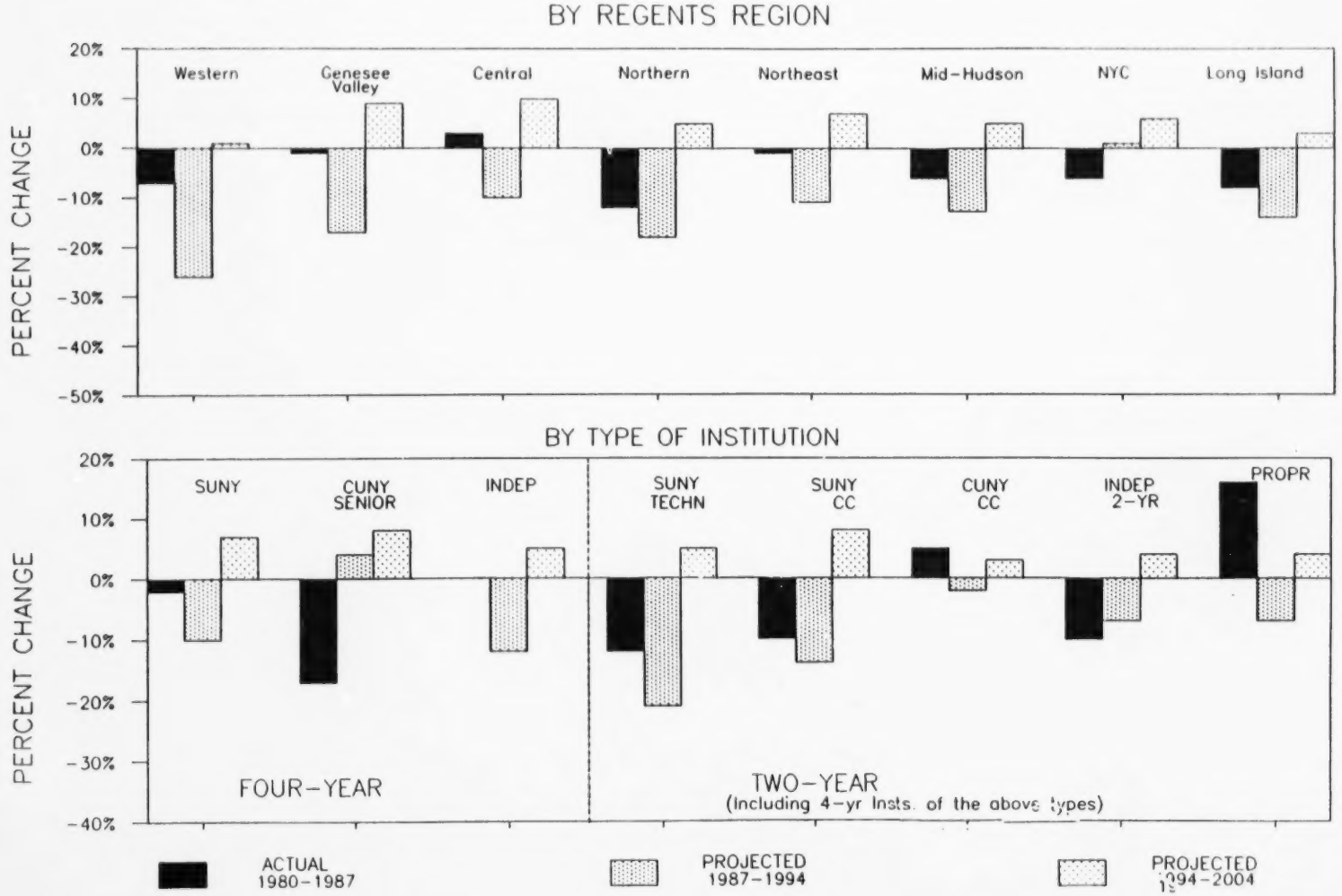

NYS: FTE ENROLLMENT PROJECTIONS
ACTUAL 1970–87, PROJECTED 1988–2004
(Thousands)
800
780
760
740
720
700
680
660
640
620
600
580
560
540
520
500
1970
1974
1978
1982
1986
1990
1994
1998
2002
+5%
0%
-5%
-10%
-15%
DIFFERENCE FROM 1987

**FIGURE 9**

# NYS:FULL-TIME UNDERGRADUATE ENROLLMENT CHANGES



not be allowed to decline over the next few years, even though enrollments are projected to decline somewhat until 1994. If the goals of access and diversity are to be achieved during a period in which an increasing number of students are expected to come from low-income families, adequate student financial aid must be available for these students.

Finally, education plays a central role in creating and maintaining the foundations of healthy and dynamic economic, social, and political systems. As Governor Cuomo said in his 1988 State of the State address: "The condition of our economy and the health of our democratic government is related inextricably to the skills and intellectual capacity of our citizens." The recent Carnegie Commission report, *Higher Education and the American Resurgence*, echoed the Governor's position on the importance of education: "Ours is a more technological, more international, but most of all more dynamic world. This country's ability to compete and to lead is dependent on the nature and quality of higher education." Demographic change poses a threat to the State's economic health if not enough people are trained to meet its work force needs over the next ten to 15 years. Work force projections generally call for either a stable or a growing number of new jobs for quite some time. Growth in the number of low-skilled service sector jobs could begin to discourage students from completing high school or from going on to college. If this occurs, New York State could discover that the number of college-educated youth will be inadequate to meet its need for a more highly educated work force in an increasingly technological national and international economy. The State may, therefore, best be served by promoting *increases* in college participation beyond levels assumed in this Plan.

***Recommendation:***

- **The following Regents enrollment projections (Tables 9-11 [pages 20-22]) are adopted for planning purposes. The Department will work closely with the institutions and the Division of Budget to assure that activities necessary to bring about the assumed participation and retention patterns are developed and supported (45).**

Table 1

NEW YORK STATE
DEMOGRAPHIC AND ENROLLMENT TRENDS
1970 TO 1987

| | 1970 | 1976 | 1980 | 1983 | 1987 |
|---|---|---|---|---|---|
| High School Graduates | 233,637 | 248,758 | 235,937 | 216,082 | 194,246 |
| Population (in thousands) | | | | | |
| Ages 25-29 | 1,226 | 1,410 | 1,428 | 1,471 | 1,505 |
| Ages 30-34 | 1,039 | 1,207 | 1,352 | 1,388 | 1,470 |
| Ages 35-44 | 2,153 | 1,970 | 2,043 | 2,273 | 2,538 |
| Ages 45-59 | 3,175 | 3,021 | 2,887 | 2,803 | 2,766 |
| College Participation at NYS Colleges | | | | | |
| of NYS High School Graduates | -- | 44.50% | 49.3% | 52.0% | 51.6% |
| of Population ages 25-29 | | | | | |
| as Part-Time Undergraduates | -- | 3.20% | 3.4% | 3.6% | 3.2% |
| as Full-Time Graduates | -- | 7.00% | 0.7% | 0.7% | 0.7% |
| as Part-Time Graduates | -- | 2.30% | 2.0% | 1.8% | 1.8% |
| of Population Ages 35-44 | | | | | |
| as Part-Time Undergraduates | -- | 1.60% | 1.9% | 1.9% | 1.7% |
| as Full-Time Graduates | -- | 0.14% | 0.16% | 0.15% | 0.15% |
| as Part-Time Graduates | -- | 0.74% | 0.8% | 0.9% | 0.8% |
| Full-Time Undergraduate College Retention Trends* | | | | | |
| Freshman to Sophomore | | | | | |
| 2-Year Institution | -- | -- | 1.00 | 1.11 | 1.22 |
| 4-Year Institution | -- | -- | 1.00 | 1.05 | 1.03 |
| Lower-Division to Upper-Division | -- | -- | 1.00 | 0.95 | 1.02 |
| Enrollment | | | | | |
| Full-Time First-Time | 139,809 | 151,762 | 162,816 | 158,591 | 141,485 |
| Full-Time Undergraduate | 439,726 | 538,147 | 560,155 | 573,219 | 536,275 |
| Part-Time Undergraduate | 168,656 | 228,131 | 244,251 | 256,350 | 255,904 |
| Full-Time Graduate | 41,097 | 45,568 | 46,912 | 47,006 | 51,953 |
| Part-Time Graduate | 99,081 | 105,687 | 98,363 | 97,700 | 99,771 |
| Full-Time First-Professional | 14,224 | 18,373 | 21,463 | 22,417 | 23,016 |
| Part-Time First-Professional | 1,745 | 1,777 | 2,344 | 2,558 | 2,551 |
| Headcount Total | 764,529 | 937,683 | 973,488 | 999,250 | 969,470 |
| Full-Time Equivalent | 591,596 | 721,117 | 750,229 | 768,194 | 737,473 |

*Rates expressed as a ratio from 1980 levels.

Source: NYSED, Office of Postsecondary Policy Analysis, 1988.

Table 2

NEW YORK STATE
RACIAL/ETHNIC DISTRIBUTION OF PUBLIC SCHOOL STUDENTS

1970, 1980 AND 1986-7

| | 1970 | | 1980 | | 1986 | |
|---|---|---|---|---|---|---|
| | N | PCT | N | PCT | N | PCT |
| BLACK | 542,851 | 15.5% | 517,007 | 18.2% | 500,622 | 19.5% |
| HISPANIC | 317,211 | 9.1% | 329,964 | 11.6% | 367,123 | 14.3% |
| WHITE | 2,612,638 | 74.6% | 1,940,240 | 68.1% | 1,604,557 | 62.5% |
| OTHER | 26,904 | 0.8% | 61,317 | 2.1% | 94,990 | 3.7% |
| TOTAL | 3,499,604 | 100% | 2,848,528 | 100% | 2,567,292 | 100% |

SOURCE: Racial/Ethnic Distribution of Public School Students and Staff, New York State Education Department, Information Center on Education, Albany, New York.

Table 4

TOTAL ENROLLMENT IN NEW YORK STATE BY RACIAL/ETHNIC CATEGORY

1980, 1982, 1984, AND 1986

| Total NYS | 1980 | 1982 | 1984 | 1986 | 1980-86 % Change |
|---|---|---|---|---|---|
| | 966,726 | 988,292 | 984,785 | 975,174 | 0.9% |
| Black | 105,735 | 106,764 | 114,488 | 109,659 | 3.7% |
| Hispanic | 54,674 | 57,503 | 63,354 | 66,736 | 22.1% |
| White | 757,265 | 766,304 | 744,669 | 726,298 | -4.1% |
| Nonresident Alien | 22,401 | 25,842 | 25,663 | 31,638 | 41.2% |
| Am. Indian or Alaskan Native | 4,532 | 4,767 | 4,809 | 4,766 | 5.2% |
| Asian or Pacific Islander | 22,119 | 27,112 | 31,802 | 36,077 | 63.1% |

NOTE: The "unknown" enrollment was allocated across the racial/ethnic categories of each sector in accordance with the known distribution in each sector. This unknown enrollment accounted for 0.0% of the enrollment in 1980, 2.2% in 1982, 3.6% in 1984, and 2.0% in 1986. The data under "Total New York State" is the sum of the four sectors.
Source: State Education Department, "College and University Racial/Ethnic Enrollment for New York State," Fall 1980 and Fall 1984. Albany, New York.

Table 3

NEW YORK STATE
YEARS OF SCHOOLING BY RACE-ETHNICITY
AGES 25-44

| Years of Schooling | 1980 N | 1980 Pct | 1986 N | 1986 Pct | Percent Change 1980 to 1986 |
|---|---|---|---|---|---|
| Less than 12 | | | | | |
| Black | 206,075 | 29.6% | 168,849 | 22.5% | -18.1% |
| Spanish | 254,248 | 49.8% | 299,358 | 41.5% | 17.7% |
| White | 575,960 | 15.3% | 594,908 | 13.2% | 3.3% |
| High School | | | | | |
| Black | 277,428 | 39.8% | 262,790 | 35.1% | -5.3% |
| Spanish | 148,525 | 29.1% | 238,203 | 33.0% | 60.4% |
| White | 1,396,070 | 37.0% | 1,647,823 | 36.5% | 18.0% |
| 1 to 3 Years College | | | | | |
| Black | 137,262 | 19.7% | 185,624 | 24.8% | 35.2% |
| Spanish | 68,016 | 13.3% | 95,060 | 13.2% | 39.8% |
| White | 752,766 | 20.0% | 881,067 | 19.5% | 17.0% |
| 4 or More Years College | | | | | |
| Black | 75,518 | 10.8% | 132,114 | 17.6% | 74.9% |
| Spanish | 39,644 | 7.8% | 88,356 | 12.3% | 122.9% |
| White | 1,044,468 | 27.7% | 1,384,732 | 30.7% | 32.6% |
| Total | | | | | |
| Black | 696,283 | 100.0% | 749,377 | 100.0% | 7.6% |
| Spanish | 510,433 | 100.0% | 720,977 | 100.0% | 41.2% |
| White | 3,769,264 | 100.0% | 4,508,530 | 100.0% | 19.6% |

*There is an overlap of Spanish with White and Black race.
The 1980 data is taken from the 1980 Census while the 1986 data is from a limited sample taken for the 1986 Current Population Survey.
SOURCE: Census and Current Population Survey data provided by the State Data Center, New York State Commerce Department, Albany, New York.
NYSED, Office of Postsecondary Policy Analysis, 1987.

Table 5

NEW YORK STATE
TOTAL UNDERGRADUATE ENROLLMENT
BY SECTOR FOR TWO- AND FOUR-YEAR INSTITUTIONS
1980, 1983, 1987

| | Fall 1980 | Fall 1983 | Fall 1987 | 1980-1987 Numbers | 1980-1987 Percent | 1983-1987 Numbers | 1983-1987 Percent |
|---|---|---|---|---|---|---|---|
| New York State | 804,406 | 829,569 | 792,179 | (12,227) | -1.5% | (37,390) | -4.5% |
| State University | 338,627 | 348,274 | 333,263 | (5,364) | -1.6% | (15,011) | -4.3% |
| City University | 156,215 | 162,524 | 158,463 | 2,248 | 1.4% | (4,061) | -2.5% |
| Independent | 286,212 | 288,885 | 274,696 | (11,516) | -4.0% | (14,189) | -4.9% |
| Proprietary | 23,352 | 29,886 | 25,757 | 2,405 | 10.3% | (4,129) | -13.8% |
| Four-Year Institutions | 535,438 | 548,681 | 536,002 | 564 | 0.1% | (12,679) | -2.3% |
| State University | 145,478 | 158,711 | 163,046 | 17,568 | 12.1% | 4,335 | 2.7% |
| City University | 111,738 | 109,165 | 104,070 | (7,668) | -6.9% | (5,095) | -4.7% |
| Independent | 272,783 | 275,522 | 263,980 | (8,803) | -3.2% | (11,542) | -4.2% |
| Proprietary | 5,439 | 5,283 | 4,906 | (533) | -9.8% | (377) | -7.1% |
| Two-Year Institutions | 268,968 | 280,888 | 256,177 | (12,791) | -4.8% | (24,711) | -8.8% |
| State University | 193,149 | 189,563 | 170,217 | (22,932) | -11.9% | (19,346) | -10.2% |
| City University | 44,477 | 53,359 | 54,393 | 9,916 | 22.3% | 1,034 | 1.9% |
| Independent | 13,429 | 13,363 | 10,716 | (2,713) | -20.2% | (2,647) | -19.8% |
| Proprietary | 17,913 | 24,603 | 20,851 | 2,938 | 16.4% | (3,752) | -15.3% |

Notes:
(1) Fashion Institute of Technology and ATC Farmingdale are included with 4-year institutions.
(2) New York City Technical College and Medgar Evers College are included with 4-year institutions.
(3) Laboratory Institute of Merchandising and the School of Visual Arts are included with 4-year institutions.

SOURCE: New York State Education Department, Higher Education Data System, Office of Postsecondary Policy Analysis, 1987.

Table 6

NEW YORK STATE
POPULATION AND HIGH SCHOOL GRADUATE PROJECTIONS
BY REGENTS REGION, 1985-86 TO 2000-01

| | ACTUAL 1985-86 | 1990-91 | 1995-96 | 2000-01 | % Change 1985-2000 |
|---|---|---|---|---|---|
| **High School Graduates*** | | | | | |
| Western | 19,630 | 16,060 | 15,366 | 15,354 | -22% |
| Genesee Valley | 16,978 | 13,729 | 14,148 | 15,247 | -10% |
| Central | 16,003 | 13,727 | 13,525 | 14,151 | -12% |
| Northern | 3,676 | 3,357 | 3,386 | 3,376 | -8% |
| Northeast | 19,103 | 16,548 | 16,493 | 17,217 | -10% |
| Mid-Hudson | 25,611 | 21,979 | 22,252 | 24,285 | -5% |
| New York City | 53,464 | 54,110 | 55,926 | 57,957 | 8% |
| Long Island | 38,128 | 30,548 | 28,772 | 30,308 | -21% |
| Total | 192,593 | 170,058 | 169,868 | 177,895 | -8% |
| **Population Ages 25-34**** | | | | | |
| Western | 251,061 | 257,950 | 233,500 | 204,950 | -18% |
| Genesee Valley | 218,319 | 233,050 | 213,450 | 191,150 | -12% |
| Central | 210,292 | 225,450 | 207,500 | 184,700 | -12% |
| Northern | 40,971 | 47,200 | 45,300 | 45,850 | 12% |
| Northeast | 247,478 | 265,200 | 244,200 | 219,600 | -11% |
| Mid-Hudson | 313,827 | 346,300 | 321,250 | 284,550 | -9% |
| New York City | 1,196,093 | 1,226,150 | 1,128,900 | 1,040,100 | -13% |
| Long Island | 433,591 | 289,050 | 423,650 | 363,700 | -16% |
| Total | 2,911,632 | 2,890,350 | 2,817,750 | 2,534,600 | -13% |
| **Population Ages 35-44**** | | | | | |
| Western | 189,894 | 218,200 | 246,100 | 254,500 | 34% |
| Genesee Valley | 177,326 | 199,150 | 218,350 | 226,200 | 28% |
| Central | 160,272 | 182,750 | 207,050 | 216,100 | 35% |
| Northern | 32,204 | 41,300 | 44,200 | 45,900 | 43% |
| Northeast | 200,945 | 232,100 | 256,000 | 270,150 | 34% |
| Mid-Hudson | 286,488 | 316,500 | 346,450 | 375,300 | 31% |
| New York City | 1,005,154 | 1,079,650 | 1,094,850 | 1,102,200 | 10% |
| Long Island | 374,423 | 435,900 | 499,700 | 533,500 | 42% |
| Total | 2,426,706 | 2,705,550 | 2,912,700 | 3,023,850 | 25% |
| **Population Ages 45-59**** | | | | | |
| Western | 232,186 | 225,350 | 250,450 | 291,500 | 26% |
| Genesee Valley | 188,879 | 197,850 | 229,450 | 264,700 | 40% |
| Central | 179,121 | 183,500 | 209,750 | 243,800 | 36% |
| Northern | 37,755 | 40,050 | 46,150 | 52,400 | 39% |
| Northeast | 221,715 | 228,200 | 268,700 | 315,300 | 42% |
| Mid-Hudson | 324,319 | 339,050 | 381,550 | 425,850 | 31% |
| New York City | 1,113,796 | 1,135,950 | 1,275,700 | 1,419,500 | 27% |
| Long Island | 448,728 | 445,400 | 495,650 | 564,250 | 26% |
| Total | 2,746,499 | 2,795,350 | 3,157,400 | 3,577,300 | 30% |

*NYSED, Information Center on Education, Dec. 1987, and modified by the Office of Postsecondary Policy Analysis, April 1988.
**NYS Department of Commerce, 1985 population projections.
Source: NYSED, Office of Postsecondary Policy Analysis, 1988.

Table 7

NEW YORK STATE
HISTORICAL AND PROJECTED ENROLLMENTS
1970-1987, 1989-2004

| | Full-Time Under-Graduate | Part-Time Under-Graduate | Full-Time Graduate | Part-Time Graduate | Total 1st Professional | Total Headcount | Full-Time Equivalent * |
|---|---|---|---|---|---|---|---|
| Historical | | | | | | | |
| 1970 | 439,726 | 168,656 | 40,799 | 99,081 | 16,128 | 764,390 | 591,457 |
| 1971 | 467,144 | 174,640 | 42,656 | 105,455 | 16,863 | 806,758 | 626,025 |
| 1972 | 473,199 | 195,417 | 42,770 | 112,937 | 17,430 | 841,753 | 642,645 |
| 1973 | 491,621 | 219,385 | 43,823 | 118,668 | 17,685 | 891,182 | 672,970 |
| 1974 | 514,587 | 234,802 | 45,079 | 124,203 | 18,301 | 936,972 | 705,149 |
| 1975 | 549,374 | 256,086 | 46,675 | 123,608 | 18,835 | 994,578 | 748,706 |
| 1976 | 538,147 | 228,131 | 45,568 | 105,687 | 20,150 | 937,683 | 721,117 |
| 1977 | 542,690 | 225,340 | 45,613 | 101,600 | 21,618 | 936,861 | 724,564 |
| 1978 | 538,343 | 229,423 | 45,625 | 99,137 | 22,792 | 935,320 | 721,732 |
| 1979 | 548,648 | 234,637 | 45,587 | 99,829 | 23,122 | 951,823 | 734,249 |
| 1980 | 560,155 | 244,251 | 46,912 | 98,363 | 23,807 | 973,488 | 750,230 |
| 1081 | 567,751 | 252,769 | 47,215 | 97,803 | 24,743 | 990,281 | 761,600 |
| 1982 | 567,169 | 254,431 | 45,649 | 94,944 | 24,795 | 986,988 | 758,885 |
| 1983 | 573,219 | 256,350 | 47,006 | 97,700 | 24,975 | 999,250 | 768,195 |
| 1984 | 557,361 | 256,536 | 47,539 | 98,060 | 24,778 | 984,274 | 752,914 |
| 1985 | 551,744 | 253,199 | 48,457 | 99,468 | 25,126 | 977,994 | 748,058 |
| 1986 | 542,302 | 255,656 | 49,868 | 101,050 | 25,303 | 974,179 | 741,585 |
| 1987 | 536,275 | 255,904 | 51,953 | 99,771 | 25,567 | 969,470 | 737,474 |
| Projected | | | | | | | |
| 1989 | 530,700 | 256,750 | 52,150 | 102,700 | 25,560 | 967,860 | 733,550 |
| 1990 | 522,700 | 256,900 | 52,200 | 104,050 | 25,560 | 961,410 | 726,190 |
| 1991 | 510,550 | 256,750 | 51,850 | 104,450 | 25,560 | 949,160 | 713,800 |
| 1992 | 498,000 | 256,150 | 51,400 | 104,050 | 25,560 | 935,160 | 700,440 |
| 1993 | 489,450 | 254,850 | 50,950 | 104,050 | 25,560 | 924,860 | 691,006 |
| 1994 | 484,650 | 253,550 | 50,550 | 104,050 | 25,560 | 918,360 | 685,373 |
| 1995 | 485,350 | 252,300 | 50,100 | 104,100 | 25,560 | 917,410 | 685,226 |
| 1996 | 487,400 | 251,350 | 49,750 | 103,950 | 25,560 | 918,010 | 686,550 |
| 1997 | 491,150 | 250,100 | 49,350 | 103,950 | 25,560 | 920,110 | 689,483 |
| 1998 | 496,250 | 248,950 | 49,110 | 103,450 | 25,560 | 923,320 | 693,760 |
| 1999 | 501,800 | 247,850 | 48,650 | 103,450 | 25,560 | 927,310 | 698,483 |
| 2000 | 506,400 | 246,800 | 48,350 | 103,450 | 25,560 | 930,560 | 702,433 |
| 2001 | 509,750 | 246,750 | 48,250 | 103,400 | 25,560 | 933,710 | 705,646 |
| 2002 | 512,250 | 246,550 | 48,050 | 102,850 | 25,560 | 935,260 | 707,660 |
| 2003 | 517,050 | 248,350 | 47,900 | 102,300 | 25,560 | 941,160 | 712,690 |
| 2004 | 522,550 | 246,150 | 47,700 | 101,800 | 25,560 | 943,760 | 717,056 |

* Full-time equivalent is all full-time plus 1/3 of part-time undergraduate plus 4/10 of part-time graduate and first-professional enrollment.

Source: NYSED, Bureau of Postsecondary Policy Analysis, 1988.

Table 8

NEW YORK STATE
HISTORICAL & PROJECTED ENROLLMENT CHANGES
BY REGION & SECTOR/TYPE OF INSTITUTION
PERCENT CHANGES 1980-1987, 1987-PROJ. 1994, & 1994-2004

| | Undergraduate | | | | | | Graduate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Full-Time | | | Part-Time | | | Full-Time | | | Part-Time | | |
| | 80-87 | 87-94 | 94-04 | 80-87 | 87-94 | 94-04 | 80-87 | 87-94 | 94-04 | 80-87 | 87-94 | 94-04 |
| Regents Region | | | | | | | | | | | | |
| Western | -7% | -26% | 1% | 8% | -2% | -6% | 11% | -3% | -6% | 9% | 8% | -2% |
| Genesee Valley | -1% | -17% | 9% | -8% | -1% | -5% | 16% | -4% | -6% | 20% | 4% | -4% |
| Central | 3% | -10% | 10% | 5% | 2% | -2% | 10% | -2% | -6% | 17% | 5% | -3% |
| Northern | -12% | -18% | 5% | 33% | 15% | 5% | 54% | 0% | -2% | -22% | 17% | 4% |
| Northeast | -1% | -11% | 7% | 15% | 2% | -2% | 5% | -2% | -6% | -9% | 6% | 0% |
| Mid-Hudson | -6% | -13% | 5% | 1% | 1% | 0% | 1% | -2% | -5% | 10% | 4% | -2% |
| New York City | -6% | 1% | 6% | 10% | -2% | -3% | 11% | -3% | -5% | -1% | 3% | -2% |
| Long Island | -8% | -14% | 3% | -8% | -4% | -4% | 13% | -2% | -7% | -5% | 4% | -3% |
| Total | -4% | -10% | 6% | 5% | -1% | -3% | 11% | -3% | -6% | 1% | 4% | -2% |
| Sector/Type | | | | | | | | | | | | |
| State University | -6% | -13% | 7% | 8% | -1% | -3% | 11% | -3% | -6% | 5% | 8% | -2% |
| 4 Year | -2% | -10% | 7% | 18% | 2% | -3% | 11% | -3% | -6% | 5% | 8% | -2% |
| College of Techn. | -12% | -21% | 5% | -12% | -1% | -3% | -- | -- | -- | -- | -- | -- |
| Community College | -10% | -14% | 8% | 7% | -1% | -3% | -- | -- | -- | -- | -- | -- |
| City University | -10% | 2% | 7% | 25% | -2% | -3% | 23% | 0% | -6% | 57% | 3% | -2% |
| Senior | -17% | 4% | 8% | 14% | -1% | -3% | 23% | 0% | -6% | 57% | 3% | -2% |
| Community College | 5% | -2% | 3% | 49% | -2% | -3% | -- | -- | -- | -- | -- | -- |
| Independent | -1% | -12% | 5% | -15% | -1% | -3% | 8% | -3% | -5% | -9% | 4% | -2% |
| 4 Year | 0% | -12% | 5% | -15% | -1% | -3% | 8% | -3% | -5% | -9% | 4% | -2% |
| 2 Year | -10% | -7% | 4% | -10% | -8% | -3% | -- | -- | -- | -- | -- | -- |
| Proprietary | 16% | -7% | 4% | -5% | 0% | -3% | -- | -- | -- | -- | -- | -- |

Source: NYSED, Office of Postsecondary Policy Analysis, 1988.

Table 9

NEW YORK STATE
REGENTS ENROLLMENT PROJECTIONS FOR FULL-TIME UNDERGRADUATES
1987-1998

| | Opening Fall 1987 | Projected 1989 | 1990 | 1991 | 1992 | 1994 | 1998 |
|---|---|---|---|---|---|---|---|
| State University | | | | | | | |
| Four-Year /1/ | 109,016 | 109,800 | 107,990 | 104,950 | 101,650 | 97,800 | 101,150 |
| Colleges of Techn. | 18,146 | 17,600 | 16,700 | 15,650 | 14,950 | 14,300 | 14,450 |
| Community Colleges | 80,579 | 79,450 | 76,110 | 72,700 | 70,450 | 69,650 | 72,200 |
| Total | 207,741 | 206,850 | 200,800 | 193,300 | 187,050 | 181,750 | 187,800 |
| City University | | | | | | | |
| Senior Colleges | 60,103 | 60,200 | 60,850 | 61,300 | 61,500 | 62,400 | 65,300 |
| Community Colleges | 32,258 | 31,400 | 31,850 | 31,700 | 31,550 | 31,600 | 31,700 |
| Total | 92,361 | 91,600 | 92,700 | 93,000 | 93,050 | 94,000 | 97,000 |
| Independent | | | | | | | |
| Four-Year | 207,370 | 204,050 | 201,400 | 197,000 | 191,150 | 182,150 | 184,500 |
| Two-Year | 8,839 | 8,950 | 8,800 | 8,550 | 8,300 | 8,250 | 8,950 |
| Total | 216,209 | 213,000 | 210,200 | 205,550 | 199,450 | 190,400 | 193,450 |
| Proprietary | | | | | | | |
| Total | 19,964 | 19,250 | 19,050 | 18,700 | 18,450 | 18,500 | 18,000 |
| GRAND TOTAL | 536,275 | 530,700 | 522,700 | 510,550 | 498,000 | 484,650 | 496,250 |

1. Fashion Institute of Technology is included in the community college total and not the four-year total. Also, four-year Colleges of Technology are included in Colleges of Technology total and not the four-year total.

Source: NYSED, Office of Postsecondary Policy Analysis, 1988.

Table 10

NEW YORK STATE
REGENTS ENROLLMENT PROJECTIONS FOR PART-TIME UNDERGRADUATES
1987-1998

| | Opening Fall 1987 | Projected 1989 | 1990 | 1991 | 1992 | 1994 | 1998 |
|---|---|---|---|---|---|---|---|
| State University | | | | | | | |
| Four-Year /1/ | 28,159 | 28,750 | 28,800 | 28,850 | 28,800 | 28,600 | 28,000 |
| Colleges of Techn. | 7,522 | 7,550 | 7,500 | 7,500 | 7,500 | 7,450 | 7,250 |
| Community Colleges | 89,841 | 89,250 | 89,250 | 89,400 | 89,350 | 88,850 | 87,050 |
| Total | 125,522 | 125,550 | 125,550 | 125,750 | 125,650 | 124,900 | 122,300 |
| City University | | | | | | | |
| Senior Colleges | 41,556 | 42,200 | 42,300 | 42,100 | 41,850 | 41,100 | 40,600 |
| Community Colleges | 24,546 | 24,650 | 24,750 | 24,600 | 24,450 | 24,000 | 23,700 |
| Total | 66,102 | 66,850 | 67,050 | 66,700 | 66,300 | 65,100 | 64,300 |
| Independent | | | | | | | |
| Four-Year | 55,294 | 55,500 | 55,500 | 55,450 | 55,350 | 54,800 | 53,750 |
| Two-Year | 3,193 | 2,950 | 2,950 | 2,950 | 2,950 | 2,950 | 2,900 |
| Total | 58,487 | 58,450 | 58,450 | 58,400 | 58,300 | 57,750 | 56,650 |
| Proprietary | | | | | | | |
| Total | 5,793 | 5,900 | 5,900 | 5,900 | 5,850 | 5,800 | 5,700 |
| GRAND TOTAL | 255,904 | 256,750 | 256,950 | 256,750 | 256,100 | 253,550 | 248,950 |

1. Fashion Institute of Technology is included in the community college total and not the four-year total. Also, four-year Colleges of Technology are included in Colleges of Technology total and not the four-year total.

Source: NYSED, Office of Postsecondary Policy Analysis, 1988.

TABLE 11

NEW YORK STATE
REGENTS ENROLLMENT PROJECTIONS FOR GRADUATES AND FIRST-PROFESSIONALS
1987-1998

| | Opening Fall 1987 | Projected 1989 | 1990 | 1991 | 1992 | 1994 | 1998 |
|---|---|---|---|---|---|---|---|
| Full-Time Graduate | | | | | | | |
| State University | 12,517 | 12,500 | 12,500 | 12,400 | 12,300 | 12,150 | 11,650 |
| City University | 5,560 | 5,800 | 5,800 | 5,750 | 5,700 | 5,550 | 5,400 |
| Independent | 33,746 | 33,700 | 33,750 | 33,550 | 33,250 | 32,700 | 31,800 |
| Proprietary | 130 | 120 | 120 | 120 | 120 | 120 | 110 |
| Total | 51,953 | 52,120 | 52,170 | 51,820 | 51,370 | 50,520 | 48,960 |
| Part-Time Graduate | | | | | | | |
| State University | 19,251 | 20,150 | 20,450 | 20,600 | 20,600 | 20,700 | 20,650 |
| City University | 18,163 | 18,800 | 19,050 | 19,050 | 18,900 | 18,750 | 18,650 |
| Independent | 62,357 | 63,750 | 64,550 | 64,800 | 64,600 | 64,600 | 64,150 |
| Proprietary | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 99,771 | 102,700 | 104,050 | 104,450 | 104,100 | 104,050 | 103,450 |
| Full-Time First-Professional | | | | | | | |
| State University | 4,276 | 4,275 | 4,275 | 4,275 | 4,275 | 4,275 | 4,275 |
| City University | 429 | 430 | 430 | 430 | 430 | 430 | 430 |
| Independent | 18,311 | 18,310 | 18,310 | 18,310 | 18,310 | 18,310 | 18,310 |
| Total | 23,016 | 23,015 | 23,015 | 23,015 | 23,015 | 23,015 | 23,015 |
| Part-Time First-Professional | | | | | | | |
| State University | 11 | 10 | 10 | 10 | 10 | 10 | 10 |
| City University | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Independent | 2,540 | 2,540 | 2,540 | 2,540 | 2,540 | 2,540 | 2,540 |
| Total | 2,551 | 2,550 | 2,550 | 2,550 | 2,550 | 2,550 | 2,550 |

Source: NYSED, Office of Postsecondary Policy Analysis, 1988.

# II
# Issues Concerning the Participation of Minorities, Women, and the Disabled in Higher Education

This chapter contains three parts. The first examines the participation of minority students at the undergraduate level. The second concerns the participation of minorities and women in underrepresented fields of study. The third examines participation in postsecondary education by persons with disabilities. Each includes Regents recommendations designed to encourage participation of these groups in postsecondary education.

## 1. Recruitment and Retention of Minority Students at the Undergraduate Level

*The High School Dropout Problem*

Nearly one out of every four New Yorkers is a minority group member, including blacks, Hispanics, and native Americans. This minority population is increasing, especially in younger age groups, due to high rates of fertility and immigration. According to the New York State Project 2000 report, *Population* (1986), in the near future four in ten babies born in the State will be minority group members, and by the year 2000 nearly one in three New Yorkers may be Hispanic or nonwhite.

Unfortunately, large proportions of minorities are not obtaining the education they need to meet the needs of an economy that increasingly requires employees to have advanced language and mathematical skills and analytical abilities. This is reflected in the high dropout rates of minority students attending secondary schools – a problem that has been well publicized in recent years. Black and Hispanic students drop out of high school in much higher proportions than their white counterparts. Comparing 12th grade enrollment in 1984 and 9th grade enrollment three years earlier, 53 percent of blacks and 57 percent of Hispanics left school before their senior year, as compared to 17 percent of white students. The 1980 Census revealed that in New York State 36 percent of blacks and 47 percent of Hispanics between 18 and 24 years of age did not graduate from high school, while only 17 percent of whites in that age category did not complete high school.

However, in recent years dropout rates have decreased, although they are still too high. As noted in the chapter on Future College Enrollment, in New York City the *annual* dropout rate for grades 9 through 12 decreased from 13.7 to 8.3 percent between 1982-83 and 1985-86. In public schools in New York State with over 50 percent minority enrollment, the dropout rate decreased from 15.2 to 8.7 percent between those years. Schools with less than 50 percent minority enrollment experienced a more modest decline in their dropout rates (from 3.8 to 3.3 percent during this period).

The high school dropout problem and the problem of underrepresentation of minorities at the college level are inextricably linked. It is obvious that a dropout problem of the size described severely diminishes the pool of college-ready minority students and consequently significantly decreases minority undergraduate enrollment. To seek further information on actions being taken by colleges and universities to address this problem, the Regents asked several questions in the questionnaire for this Plan.

Minority students who do complete high school attend college at somewhat higher rates than white high school graduates. In 1984, while 67 percent of white high school graduates went on to college, the proportion for blacks was 69 percent, and for Hispanics, 73 percent. Therefore, a significant reduction in the dropout rate among minority high school students could result in substantial increases in minority undergraduate enrollment. For example, the Department estimates that if all high school students dropped out of high school in the same proportions as whites during the period 1982 through 1986, roughly 35,000 additional students would have graduated in the spring of 1986. Assuming historical college-going rates, this would have resulted in about 17,000 additional undergraduate students in the fall of 1986.

To provide information and guidance for this plan each postsecondary institution in the State was asked to complete a questionnaire concerning the recruitment of minority students, among other topics. In answering that questionnaire, large proportions of postsecondary institutions

Table 12
UNDERGRADUATE ENROLLMENT TRENDS
BY RACIAL/ETHNIC GROUP, NYS, 1980-86

| | 1980 | | 1986 | | % Change |
|---|---|---|---|---|---|
| | Number | % Share | Number | % Share | 1980-86 |
| Blacks (Non-Hisp.) | 96,694 | 12.3% | 100,104 | 12.8% | +3.5% |
| Hispanics | 48,976 | 6.2% | 60,095 | 7.7% | +22.7% |
| Whites (Non-Hisp.) | 620,058 | 78.7% | 587,404 | 75.2% | -5.3% |
| Other | 34,934 | 4.4% | 50,869 | 6.5% | +45.6% |
| American Indian/ Alaskan | 4,105 | .5% | 4,184 | .5% | +1.9% |
| Asian/Pacific Islander | 17,596 | 2.2% | 29,103 | 3.7% | +65.4% |
| Total* | 787,429 | 100.0% | 780,891 | 100.0% | -8.3% |

*Excludes nonresident alien enrollment.

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 13
RACIAL/ETHNIC DISTRIBUTION
UNDERGRADUATE ENROLLMENT AND POPULATION
AGE: 15-24, NEW YORK STATE

| | Undergrad. Enrollment 1986 | Population Ages 15-24 1980 |
|---|---|---|
| Black (Non-Hispanic) | 12.8% | 14.7% |
| American Indian/Alaskan | .5% | .3% |
| Asian/Pacific Islander | 3.7% | 1.5% |
| Hispanic | 7.7% | 10.7% |
| White (Non-Hispanic) | 75.2% | 72.7% |
| Total* | 100.0% | 100.0% |

*Excludes nonresident alien enrollment.

Source: NYSED, Bureau of Postsecondary Planning, 1988.

reported that entering minority students did not have adequate preparation at lower levels. This was viewed as a major obstacle to minority recruitment.

The Regents believe that the resources of colleges and universities should be employed to a greater extent to address the high school dropout problem, improve the academic preparation of minority students, and enrich educational offerings at the high school level. An important component of the recently enacted Liberty Scholarship Program is Liberty Partnerships – grants to colleges and universities or community organizations in support of cooperative programs with local school districts designed to provide counseling and support services to high school students at risk of dropping out. The Regents encourage coordination and sharing of resources and expertise between the postsecondary and secondary levels and make the following recommendations for further action in this area:

- **The Regents recognize the importance of encouraging students to complete high school to prepare for postsecondary education. Therefore, they will seek expansion of the Science and Technology Entry Program and the Stay in School Partnership Program. In addition, they call on colleges and universities to help improve counseling and guidance services for all middle, junior, and senior high school pupils to insure that they are aware of opportunities for postsecondary education and to develop programs to provide high school students with mentors and role models in order to foster high school completion and college participation (33).**

- **The Regents urge colleges and universities to work with elementary and secondary schools to meet the full range of community needs. They will consult with concerned groups to determine the most effective ways to support such efforts. The Regents call on the Statewide Committee on Educational Opportunity and the Commissioner's Advisory Council on Postsecondary Education for advice on actions the State might take to assist colleges and universities in their efforts to encourage greater numbers of pupils to complete high school.**

*Minority Recruitment*

Even though the dropout problem prevents significant numbers of minority students from pursuing higher education, a large number do enroll in the State's colleges and universities each year. In the fall of 1986, 100,000 blacks, 60,000 Hispanics, and 4,000 native Americans were enrolled as undergraduates (Table 12).

Black and Hispanic minorities are nonetheless underrepresented at the undergraduate level in comparison to their proportionate share in the population (Table 13). Blacks make up 15 percent of the age group most likely to attend at the undergraduate level (ages 15-24) but only 13 percent of total undergraduate enrollment. Hispanics constitute nearly 11 percent of the population in this age group, but only eight percent of undergraduates. Native Americans constitute a small proportion of the State's population (0.3 percent); their representation in undergraduate enrollment is proportionate (0.5 percent).

Overall minority representation at the undergraduate level has improved somewhat in the 1980's. While the black undergraduate enrollment share remained fairly stable, increasing by one-half of a percentage point (from 12.3 to 12.8 percent) between 1980 and 1986, the Hispanic enrollment share increased by 1.5 percentage points, from 6.2 to 7.7 percent. The enrollment share of native Americans remained stable at 0.5 percent (Table 12).

The actual number of minority undergraduates also increased, although enrollment of nonminority students declined. This caused overall undergraduate enrollment to be stable, decreasing by only 0.8 percent between 1980 and 1986. Black undergraduate enrollment increased by four percent, Hispanic undergraduate enrollment increased substantially by 23 percent, and native American undergraduate enrollment increased by two percent (Table 12). Statewide enrollment of minorities compares favorably with minority enrollment nationwide: black undergraduate enrollment actually declined by three percent in the nation; Hispanic undergraduate enrollment increased significantly (by 30 percent) in the nation as in New York.

As noted elsewhere in this Plan (see Appendix A of this volume), since 1973, State University's Educational Opportunity Centers have served over 120,000 persons. Of the 11,800 students enrolled in 1985-86, almost 55 percent were black, 18 percent Hispanic, and 0.5 percent native American.

Based on the answers to the questionnaire for this Plan, it appears that minority students are encouraged to attend college by exposure to available postsecondary educational opportunities and by supplemental funding and programs to meet financial and academic need. Across all sectors, the strategy of bringing prospective minority students to campus was ranked either first, second, or third in terms of the number of institutions reporting it as "effective" or "highly effective." The availability of special programs was ranked second or third in each sector.

It is apparent that institutions in New York City have a different set of appropriate recruitment strategies among which to choose, because of their location in the part of the State with the largest concentration of minority group members. This is evident in the differences between the responses by City University (wholly located in New York City) and proprietary institutions, on the one hand, and those of State University and independent colleges on the other. For CUNY and for proprietary colleges, the strategy

Table 14
OBSTACLES RATED AS "MAJOR" TO THE RECRUITMENT OF MINORITY STUDENTS

| Factors | SUNY | CUNY | INDEP | PROP |
|---|---|---|---|---|
| Inability to Hire Professional Staff to Recruit in Minority Neighborhoods | 2% | 0% | 7% | 0% |
| Lack of Personnel to Communicate Effectively | 3% | 0% | 7% | 0% |
| Lack Coordination with Secondary Schools in Minority Areas | 8% | 0% | 0% | 4% |
| Lack of Qualified Minority Students | 28% | 20% | 28% | 4% |
| Lack Funds for Scholarships | 41% | 45% | 27% | 12% |
| Student Disinterest | 23% | 10% | 26% | 8% |
| Location Outside Minority Concentrations | 41% | 5% | 13% | 12% |
| | (N=60-61) | (N=19-20) | (N=106-110) | (N=25) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 15
INSTITUTIONAL ACTIVITIES RATED "EFFECTIVE OR HIGHLY EFFECTIVE" TO INCREASE MINORITY PARTICIPATION

| Activities | SUNY | CUNY | INDEP | PROP |
|---|---|---|---|---|
| Recruitment in Minority High Schools | 53% | 85% | 42% | 64% |
| Special Recruitment Materials | 21% | 25% | 15% | 8% |
| Advertise Minority Media | 8% | 5% | 8% | 25% |
| Partnership Arrangements | 23% | 65% | 17% | 12% |
| Minority Student Recruit | 38% | 50% | 39% | 12% |
| Bringing Minorities to Campus | 73% | 80% | 58% | 56% |
| Presence of Minority Student Assn. | 51% | 55% | 30% | 4% |
| Visible Minority Faculty & Admin. | 33% | 60% | 29% | 32% |
| Active Minority Community | 28% | 55% | 27% | 28% |
| Establish Off-Campus Locations | 17% | 20% | 11% | 0% |
| Presence of Special Programs | 56% | 80% | 43% | 60% |
| Use of Institutionally Funded Student Aid | 36% | 30% | 61% | 32% |
| | (N=59-61) | (N=20) | (N=113) | (N=25) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

ranked "effective" or "highly effective" by the largest proportion of campuses was recruitment in high schools with high proportions of minority students; this was third-ranked among SUNY campuses (including community colleges) and was not among the three most frequently identified by independent institutions as "effective" or "highly effective." Only at City University were partnership arrangements with secondary schools serving minority students among the three most frequently ranked "effective" or "highly effective."

In response to the questionnaire, significant proportions of institutions in all four sectors identified as a major obstacle the lack of funds for special institutional student aid and scholarships (Table 14). Likewise, while these were not among the strategies ranked first, second, or third in every sector, significant proportions of institutions identified the following as effective activities to recruit minority students: offering special programs to meet minority students' needs, direct recruitment of students in high schools with large minority populations, and bringing minorities to the college campus (Table 15).

Further improvements in the representation of minority groups at undergraduate and higher levels are a major priority of the Regents. The existing opportunity programs – SEEK, College Discovery, EOP, and HEOP – provide educationally and economically disadvantaged students, many of them minority-group members, with the academic and financial support they need to undertake a college education. In 1987-88, the programs served nearly 32,000 students at a cost of $48.5 million. The Regents support expansion of these programs.

Although overall black undergraduate enrollment increased by 24 percent at two-year colleges between 1980 and 1986, it declined by seven percent at four-year institutions. Hispanic undergraduate enrollment increased at a much slower rate at four-year institutions (13 percent) than at two-year schools (41 percent) (Table 16, page 28). The two-year institutions that have increased minority enrollment the most are the CUNY community colleges, where black and Hispanic undergraduate enrollment increased by 28 percent. The CUNY community colleges have been successful in attracting growing numbers of minority students because they have structured programs to meet the needs of minority students and because they are located in New York City, a major concentration of minority population.

Independent institutions have not been as successful as other institutions in attracting minority students in recent years. Between 1980 and 1986, black undergraduate enrollment declined by eight percent at independent institutions, while Hispanic undergraduate enrollment increased by six percent at these colleges (Table 17, page 28). There are several likely reasons for this. The independent sector has relatively few two-year institutions, and those that do exist are mainly small liberal arts and specialized institutions quite dissimilar in mission from community colleges. Also, the cost of attendance at independent institutions is higher than at public institutions, requiring students to maintain higher loan burdens. As stated above, institutional lack of funds for student aid is a major obstacle to minority recruitment.

The Regents are concerned about these recent trends and encourage all postsecondary institutions, but especially independent colleges and universities, to expand efforts to recruit minority students. Also, the Regents encourage four-year institutions to expand recruitment efforts so that minority students have increased opportunities to pursue baccalaureate and higher degrees. In support of these issues the Regents take the following action:

- **The Regents direct the Department to identify successful programs to recruit minority students to institutions which historically have enrolled few minorities or which are located in areas where the minority population is low. The Department will analyze these programs to identify the elements that make them successful and will share this information with the field (1).**

*Retention of Minorities*

Black and Hispanic students drop out of college at higher rates than their white counterparts. The Department estimates that approximately 50 percent of white students who entered four-year programs between 1978 and 1981 received their undergraduate degrees by the spring of 1985. However, a much lower proportion of black and Hispanic students – 30 percent – are estimated to have completed baccalaureate programs during the same period. Minority students also drop out of two-year programs at higher rates than white students. The Department estimates that 30 percent of white students who entered such programs between 1981 and 1983 completed them by the spring of 1985; the percentage for black students was estimated to be 24 percent and for Hispanic students, 22 percent.

In response to the questionnaire for the Plan, significant proportions of institutions in all sectors identified three major obstacles: lack of institutional funds for special intervention programs, minority students' job and family responsibilities, and inability to afford college study. These obstacles are directly related to frequent reasons that minority students gave for dropping out, according to the institutions: academic problems, family concerns, and finances (Tables 18 and 19, pages 28 and 29).

In response to the questionnaire, colleges and universities identified effective activities to reduce attrition among minority group members. Three activities, all related to increasing academic performance, were identified by significant proportions of institutions: tutorial assistance, reme-

Table 16
MINORITY UNDERGRADUATE ENROLLMENT
BY LEVEL OF INSTITUTION, NYS, 1980-86

| | Blacks | | | Hispanics | | |
|---|---|---|---|---|---|---|
| | 1980 | 1986 | Change 1980-86 | 1980 | 1986 | Change 1980-86 |
| 4-Year[1] Institutions | 63,597 | 59,052 | -7.1% | 31,363 | 35,357 | +12.7% |
| 2-Year[2] Institutions | 33,097 | 41,052 | +24.0% | 17,613 | 24,738 | +40.5% |
| Total | 96,694 | 100,104 | +3.5% | 48,976 | 60,095 | +22.7% |

[1] Includes SUNY 4-Year institutions, CUNY Senior Colleges, and Independent 4-Year institutions.

[2] Includes SUNY Agricultural and Technical Colleges (some of which offer 4-Year programs), SUNY Community Colleges, CUNY Community Colleges, Independent 2-Year institutions, and Proprietary institutions.

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 17
MINORITY UNDERGRADUATE ENROLLMENT
BY SECTOR, NYS, 1980-86

| | Blacks | | | Hispanics | | |
|---|---|---|---|---|---|---|
| | 1980 | 1986 | Change 1980-86 | 1980 | 1986 | Change 1980-86 |
| SUNY | 19,954 | 20,893 | +4.7% | 6,454 | 8,761 | +35.7% |
| CUNY | 46,432 | 48,228 | +3.9% | 27,459 | 34,139 | +24.3% |
| INDEP. | 26,636 | 24,444 | -8.3% | 13,239 | 14,052 | +6.1% |
| PROP. | 3,672 | 6,539 | +78.1% | 1,824 | 3,143 | +72.3% |
| Total | 96,694 | 100,104 | +3.5% | 48,976 | 60,095 | +22.7% |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 18
OBSTACLES RATED AS "MAJOR" TO THE RETENTION OF
MINORITY STUDENTS

| Factor | SUNY | CUNY | INDEP | PROP |
|---|---|---|---|---|
| Lack Funds for Intervention Programs | 51% | 60% | 21% | 41% |
| Job/Family Responsibilities | 34% | 75% | 30% | 52% |
| Inability to Afford Education | 33% | 60% | 42% | 28% |
| Lack of Minority Faculty/Admin. Staff | 36% | 15% | 19% | 0% |
| Lack of Appropriate Social/ Cultural Activities | 26% | 0% | 7% | 0% |
| Surrounding Community Unsupportive | 13% | 0% | 4% | 4% |
| Location Outside Minority Concentrations | 42% | 15% | 8% | 11% |
| | (N=61) | (N=20) | (N=108-110) | (N=25) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 19
PERCENT OF INSTITUTIONS IDENTIFYING FACTOR
AS "FREQUENT" REASON FOR LEAVING COLLEGE
BLACKS, HISPANICS, WHITES

BLACKS

| Factors | SUNY | CUNY | INDEP. | PROP. |
|---|---|---|---|---|
| Finances | 41% | 88% | 44% | 33% |
| Academic Problems | 41% | 63% | 33% | 33% |
| Family Concerns | 20% | 44% | 21% | 48% |
| Transfer | 11% | 13% | 16% | 4% |
| Health | 0% | 6% | 0% | 21% |
| Peer Pressure | 0% | 6% | 4% | 4% |
| Employment | 11% | 25% | 6% | 6% |
| | (N=46-47) | (N=16) | (N=86-89) | (N=24) |

HISPANICS

| Factors | SUNY | CUNY | INDEP. | PROP. |
|---|---|---|---|---|
| Finances | 31% | 87% | 38% | 25% |
| Academic Problems | 33% | 60% | 28% | 25% |
| Family Concerns | 14% | 40% | 16% | 42% |
| Transfer | 11% | 13% | 15% | 4% |
| Health | 2% | 7% | 0% | 21% |
| Peer Pressure | 0% | 7% | 2% | 4% |
| Employment | 11% | 27% | 5% | 5% |
| | (N=44-45) | (N=15) | (N=85-88) | (N=24) |

WHITES

| Factors | SUNY | CUNY | INDEP. | PROP. |
|---|---|---|---|---|
| Finances | 31% | 50% | 35% | 25% |
| Academic Problems | 22% | 29% | 29% | 29% |
| Family Concerns | 9% | 14% | 11% | 33% |
| Transfer | 42% | 36% | 31% | 17% |
| Health | 6% | 7% | 2% | 17% |
| Peer Pressure | 0% | 0% | 0% | 4% |
| Employment | 24% | 21% | 7% | 7% |
| | (N=50-51) | (N=14) | (N=87-89) | (N=24) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 20
INSTITUTIONAL ACTIVITIES RATED "EFFECTIVE OR HIGHLY EFFECTIVE" TO INCREASE MINORITY RETENTION

| Activities | SUNY | CUNY | INDEP | PROP |
|---|---|---|---|---|
| Increased Financial Aid | 32% | 45% | 58% | 60% |
| More Intensive Academic Advisement | 75% | 90% | 69% | 60% |
| Increased Tutorial Assistant | 75% | 75% | 68% | 56% |
| Increased Remedial Instruction | 71% | 85% | 61% | 56% |
| Prefreshman Summer Program | 43% | 89% | 44% | 8% |
| Increased Counseling-Self Image | 47% | 50% | 44% | 44% |
| Increase Minority Faculty | 27% | 58% | 18% | 76% |
| Provision of Child Care | 38% | 50% | 2% | 8% |
| Convenient Class Schedule | 31% | 50% | 23% | 48% |
| Off-Campus locations | 23% (N=59-61) | 35% (N=19-20) | 12% (N=106-111) | 4% (N=24-25) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

dial instruction, and academic advisement. One striking difference across sectors should be noted. While significant proportions of SUNY and CUNY institutions indicated that provision of child care was effective to reduce minority attrition, less than ten percent of independent institutions provided this service for that purpose. One possible reason for this is that the public institutions receive partial State funding for child care services, while independent and proprietary institutions do not (Table 20).

The Regents are concerned that minority students are not receiving the level of financial and academic support they need to successfully complete degree programs. Therefore, the Regents seek expansion of the special opportunity programs. Also, minority students may be leaving college because of lack of adequate child care. Note that job and family responsibility was identified as a major obstacle to minority retention, and family concerns a frequently given reason for dropping out. Therefore, the Regents make the following recommendation:

- **The Regents recommend to the Governor that he seek from the Legislature additional funding to initiate or expand child care services on college campuses (8).**

Based on the responses to the questionnaire for the Plan, high proportions of institutions in the State had both retention and recruitment plans for minority students. However, relatively low proportions had plans that were written and formally adopted. The Regents believe that written and formally adopted plans send a strong signal to the campus community regarding institutional commitment to minority participation. Therefore, during the period of this Plan:

- **The Department will encourage institutions to establish written, formal plans to recruit and retain underrepresented minority students and to measure their progress in meeting their goals (2).**

## 2. The Participation of Women and Minorities in Underrepresented Fields

The Regents are concerned about low rates of female and minority participation in mathematics, scientific and technical fields, and the professions. Education in these fields often leads to lucrative professional careers, and the Regents are concerned that such opportunities are not being made available to all in our society. Scientific and technical experts often play key roles in shaping the future of society; a more representative scientific and technical work force would help to ensure that the interests of all segments of our society are taken into account. In addition, greater representation of women and minorities can assist in meeting professional staff shortages in many of these fields.

*Representation of Women*

Women constitute 53 percent of the population of New York State. They obtained 53 percent of all baccalaureate degrees, 56 percent of all master's degrees, 36 percent of all first-professional degrees, and 41 percent of all doctoral degrees conferred in the State in 1986. Therefore, in overall terms, women are equitably represented at lower levels, but underrepresented at the first-professional and doctoral levels.

However, even at the baccalaureate and master's degree levels, women are underrepresented in mathematics and in scientific and technical fields. Female participation in computer science, engineering, and the physical sciences is particularly low (Table 21, page 32). It is because women receive large proportions of degrees in other fields – the liberal arts, education, nursing, and library science – that overall representation at the baccalaureate and master's levels is representative of their share in the population of New York State.

Women are underrepresented in all first-professional degree programs. They received only one-third of all Doctor of Medicine degrees conferred, and only 19 percent of all degrees in dentistry in 1986. Female representation in law programs is more equitable, but the proportion of law degrees conferred on women (43 percent) is still a full ten points lower than their proportionate share in the population.

At the doctoral level, the academic paths that men and women take diverge still further. Women are severely underrepresented in mathematics and in all scientific and technical fields (Table 21) while they receive a majority of degrees in education, nursing, letters, and psychology. Overall, women received only 41 percent of the doctoral degrees awarded in 1986.

In response to the questionnaire for the Plan, significant proportions of institutions reported that lack of adequate preparation and lack of role models were major obstacles to the participation of women in underrepresented fields. In addition, significant proportions indicated that increasing academic and career counseling were effective activities to increase female recruitment to these fields – the latter was ranked among the top three in each sector. Increasing the number of female faculty also was frequently reported to be an effective activity by institutions in all sectors.

*Representation of Minorities*

Blacks and Hispanics are underrepresented at the postsecondary level, overall. Although blacks and Hispanics constitute nearly 23 percent of the State's population, only

Table 21

PROPORTIONS OF BACHELOR'S AND HIGHER DEGREES CONFERRED IN NEW YORK STATE
BY SEX AND MAJOR SUBJECT AREA
1985-86

| Subject Area | Bachelor's | | Master's | | 1st-Professional | | Doctoral | |
|---|---|---|---|---|---|---|---|---|
| | Pct. Men | Pct.Women | Pct. Men | Pct.Women | Pct. Men | Pct.Women | Pct. Men | Pct.Women |
| Agriculture | 52.5% | 47.5% | 70.9% | 29.1% | --- | --- | 80.3% | 19.7% |
| Architecture | 66.3% | 33.7% | 64.4% | 35.6% | --- | --- | 63.6% | 36.4% |
| Area Studies | 35.0% | 65.0% | 41.3% | 58.8% | --- | --- | 25.0% | 75.0% |
| Biological Sciences | 52.1% | 47.9% | 43.1% | 56.9% | --- | --- | 61.6% | 38.4% |
| Business & Mgmt. | 51.2% | 48.8% | 65.0% | 35.0% | --- | --- | 74.4% | 25.6% |
| Communications | 43.5% | 56.5% | 43.4% | 56.6% | --- | --- | 50.0% | 50.0% |
| Computer/Info. Sci. | 62.8% | 37.2% | 67.5% | 32.5% | --- | --- | 86.1% | 13.9% |
| Education | 16.8% | 83.2% | 20.5% | 79.5% | --- | --- | 42.4% | 57.6% |
| Engineering | 86.3% | 13.7% | 87.9% | 12.1% | --- | --- | 92.8% | 7.2% |
| Fine & Appl. Arts | 39.3% | 60.7% | 44.3% | 55.7% | --- | --- | 55.2% | 44.8% |
| Foreign Languages | 22.6% | 77.4% | 27.2% | 72.8% | --- | --- | 43.1% | 56.9% |
| Health Professions: | 13.1% | 86.9% | 16.6% | 83.5% | 68.3% | 31.7% | 24.5% | 75.5% |
| Dentistry (D.D.S.) | --- | --- | --- | --- | 80.7% | 19.3% | --- | --- |
| Medicine (M.D.) | --- | --- | --- | --- | 67.3% | 32.7% | * | * |
| Nursing | * | * | * | * | --- | --- | * | * |
| Optometry | --- | --- | --- | --- | 56.9% | 43.1% | --- | --- |
| Osteopathic Med. | --- | --- | --- | --- | 76.6% | 23.4% | --- | --- |
| Pharmacy | * | * | * | * | 52.6% | 47.4% | * | * |
| Podiatry | --- | --- | --- | --- | 76.7% | 23.3% | --- | --- |
| Veterinary Med. | --- | --- | --- | --- | 45.8% | 54.2% | * | * |
| Chiropractic | --- | --- | --- | --- | 64.2% | 35.8% | --- | --- |
| Other | * | * | * | * | --- | --- | * | * |
| Home Economics | 12.1% | 87.9% | 11.0% | 89.0% | --- | --- | 35.5% | 64.5% |
| Law | --- | --- | 74.4% | 25.6% | 57.4% | 42.6% | 100.0% | 0.0% |
| Letters | 37.9% | 62.1% | 33.7% | 66.3% | --- | --- | 47.2% | 52.8% |
| Library Science | 50.0% | 50.0% | 23.6% | 76.4% | --- | --- | 33.3% | 66.7% |
| Mathematics | 53.0% | 47.0% | 56.5% | 43.5% | --- | --- | 81.1% | 18.9% |
| Physical [illegible]nces | 72.7% | 27.3% | 73.3% | 26.7% | --- | --- | 85.8% | 14.2% |
| Psychology | 27.5% | 72.5% | 33.4% | 66.6% | --- | --- | 43.0% | 57.0% |
| Public Affairs | 40.2% | 59.8% | 27.3% | 72.7% | --- | --- | 51.4% | 48.6% |
| Social Sciences | 53.3% | 46.7% | 55.3% | 44.7% | --- | --- | 62.2% | 37.8% |
| Theology | 50.0% | 50.0% | 56.8% | 43.2% | 65.2% | 34.8% | 72.7% | 27.3% |
| Interdisc. Studies | 47.8% | 52.2% | 40.2% | 59.8% | --- | --- | 66.7% | 33.3% |
| TOTAL | 47.1% | 52.9% | 44.4% | 55.6% | 63.8% | 36.2% | 59.5% | 40.5% |

Source: NYSED, Information Center on Education.

Table 22

DEGREES CONFERRED
BY MAJOR SUBJECT AREA, RACE/ETHNIC GROUP, AND LEVEL OF STUDY
NEW YORK STATE, 1984-85

| FIELD | BACHELOR'S | | | | | | MASTER'S | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BLACK | PCT.OF TOTAL | HIS-PANIC | PCT.OF TOTAL | WHITE | PCT.OF TOTAL | BLACK | PCT.OF TOTAL | HIS-PANIC | PCT.OF TOTAL | WHITE | PCT.OF TOTAL | NONRES. ALIEN | PCT.OF TOTAL |
| AGRICULTURE | 19 | 3.1% | 7 | 1.1% | 554 | 90.4% | 1 | 0.9% | 1 | 0.9% | 70 | 65.4% | 32 | 29.9% |
| ARCH.&ENVIRON.DESIGN | 81 | 7.3% | 64 | 5.8% | 815 | 73.9% | 16 | 3.9% | 8 | 1.9% | 302 | 73.1% | 71 | 17.2% |
| AREA/ETHNIC STUDIES | 53 | 15.5% | 21 | 6.1% | 244 | 71.1% | 7 | 8.3% | 11 | 13.1% | 36 | 42.9% | 11 | 13.1% |
| BUSINESS | 1,421 | 7.8% | 635 | 3.5% | 14,998 | 82.7% | 225 | 3.5% | 95 | 1.5% | 5,387 | 83.3% | 460 | 7.1% |
| COMMUNICATIONS | 243 | 7.3% | 116 | 3.5% | 2,843 | 85.6% | 43 | 7.5% | 13 | 2.3% | 465 | 81.0% | 48 | 8.4% |
| COMPUTER SCIENCE | 266 | 6.3% | 168 | 4.0% | 3,286 | 78.4% | 60 | 4.5% | 38 | 2.9% | 800 | 60.4% | 266 | 20.1% |
| EDUCATION | 376 | 8.5% | 210 | 4.8% | 3,690 | 83.5% | 566 | 7.8% | 405 | 5.6% | 5,658 | 78.4% | 438 | 6.1% |
| ENGINEERING | 307 | 4.5% | 209 | 3.1% | 5,378 | 79.5% | 67 | 3.3% | 42 | 2.0% | 1,247 | 60.8% | 485 | 23.6% |
| FOREIGN LANGS. | 56 | 5.5% | 111 | 11.0% | 804 | 79.6% | 6 | 2.2% | 31 | 11.5% | 205 | 76.2% | 24 | 8.9% |
| HEALTH | 710 | 13.0% | 243 | 4.5% | 4,270 | 78.3% | 131 | 6.8% | 45 | 2.3% | 1,615 | 83.8% | 72 | 3.7% |
| HOME ECONOMICS | 70 | 8.8% | 34 | 4.3% | 645 | 81.1% | 14 | 7.7% | 10 | 5.5% | 143 | 78.1% | 10 | 5.5% |
| LAW | --- | --- | --- | --- | --- | --- | 4 | 0.8% | 9 | 1.8% | 445 | 87.8% | 37 | 7.3% |
| LETTERS | 241 | 5.9% | 102 | 2.5% | 3,617 | 88.6% | 26 | 4.0% | 18 | 2.8% | 519 | 80.3% | 73 | 11.3% |
| LIBERAL/GENL STUDIES | 606 | 14.9% | 202 | 5.0% | 3,062 | 75.3% | 10 | 2.6% | 15 | 3.9% | 346 | 90.8% | 8 | 2.1% |
| LIBRARY STUDIES | 0 | 0.0% | 0 | 0.0% | 1 | 100.0% | 22 | 5.5% | 8 | 2.0% | 343 | 85.3% | 20 | 5.0% |
| LIFE SCIENCES | 176 | 5.2% | 135 | 4.0% | 2,831 | 83.7% | 18 | 3.0% | 18 | 3.0% | 495 | 83.5% | 35 | 5.9% |
| MATHEMATICS | 67 | 4.1% | 36 | 2.2% | 1,357 | 84.0% | 10 | 3.1% | 9 | 2.8% | 237 | 72.9% | 54 | 16.6% |
| INTERDISCIP. STUDIES | 47 | 6.0% | 16 | 2.1% | 703 | 90.2% | 8 | 3.6% | 4 | 1.8% | 184 | 82.9% | 13 | 5.9% |
| PARKS & RECREATION | 6 | 3.2% | 2 | 1.1% | 174 | 93.5% | 2 | 50.0% | 1 | 25.0% | 1 | 25.0% | 0 | 0.0% |
| PHILOS, RELIG, THEOL | 23 | 4.0% | 19 | 3.3% | 512 | 89.2% | 14 | 5.3% | 7 | 2.6% | 216 | 81.5% | 27 | 10.2% |
| PHYSICAL SCIENCES | 77 | 4.0% | 50 | 2.6% | 1,694 | 87.3% | 9 | 1.8% | 10 | 2.0% | 353 | 70.3% | 104 | 20.7% |
| PSYCHOLOGY | 343 | 7.9% | 223 | 5.1% | 3,612 | 83.1% | 55 | 7.5% | 43 | 5.8% | 575 | 78.0% | 43 | 5.8% |
| PUBLIC AF.& SERVICES | 362 | 17.3% | 182 | 8.7% | 1,508 | 72.2% | 246 | 10.1% | 133 | 5.5% | 1,975 | 81.0% | 44 | 1.8% |
| SOCIAL SCIENCES | 886 | 8.5% | 473 | 4.5% | 8,507 | 81.6% | 103 | 7.0% | 49 | 3.3% | 1,061 | 72.5% | 186 | 12.7% |
| VISUAL & PERF. ARTS | 236 | 0.5% | 141 | 3.0% | 4,005 | 85.6% | 57 | 3.8% | 47 | 3.1% | 1,197 | 78.9% | 165 | 10.9% |
| TOTAL | 6,672 | 7.9% | 3,399 | 4.0% | 69,110 | 82.0% | 1,720 | 5.6% | 1,070 | 3.5% | 23,875 | 78.0% | 2,726 | 8.9% |

Source: NYSED, Information Center on Education.

Table 22
(Continued)
DEGREES CONFERRED
BY MAJOR SUBJECT AREA, RACE/ETHNIC GROUP, AND LEVEL OF STUDY
NEW YORK STATE, 1984-85

DOCTORAL

| FIELD | BLACK | PCT.OF TOTAL | HIS-PANIC | PCT.OF TOTAL | WHITE | PCT.OF TOTAL | NONRES. ALIEN | PCT.OF TOTAL |
|---|---|---|---|---|---|---|---|---|
| AGRICULTURE | 3 | 4.9% | 2 | 3.3% | 34 | 55.7% | 22 | 36.1% |
| ARCH.&ENVIRON.DESIGN | 0 | 0.0% | 0 | 0.0% | 5 | 83.3% | 1 | 16.7% |
| AREA/ETHNIC STUDIES | 0 | 0.0% | 0 | 0.0% | 3 | 100.0% | 0 | 0.0% |
| BUSINESS | 0 | 0.0% | 0 | 0.0% | 44 | 62.9% | 20 | 28.6% |
| COMMUNICATIONS | 2 | 11.8% | 1 | 5.9% | 9 | 52.9% | 5 | 29.4% |
| COMPUTER SCIENCE | 0 | 0.0% | 0 | 0.0% | 15 | 60.0% | 10 | 40.0% |
| EDUCATION | 40 | 7.5% | 10 | 1.9% | 416 | 77.8% | 62 | 11.6% |
| ENGINEERING | 2 | 0.7% | 1 | 0.3% | 127 | 43.3% | 136 | 46.4% |
| FOREIGN LANGS. | 5 | 6.8% | 9 | 12.2% | 53 | 71.6% | 5 | 6.8% |
| HEALTH | 5 | 4.1% | 3 | 2.4% | 99 | 80.5% | 7 | 5.7% |
| HOME ECONOMICS | 0 | 0.0% | 1 | 2.9% | 26 | 76.5% | 6 | 17.6% |
| LAW | 0 | 0.0% | 0 | 0.0% | 3 | 60.0% | 2 | 40.0% |
| LETTERS | 1 | 0.6% | 3 | 1.9% | 134 | 85.9% | 17 | 10.9% |
| LIBERAL/GENL STUDIES | 0 | 0.0% | 0 | 0.0% | 1 | 100.0% | 0 | 0.0% |
| LIBRARY STUDIES | 1 | 33.3% | 1 | 33.3% | 0 | 0.0% | 0 | 0.0% |
| LIFE SCIENCES | 4 | 1.1% | 8 | 2.3% | 285 | 0.814 | 37 | 10.6% |
| MATHEMATICS | 0 | 0.0% | 8 | 9.8% | 31 | 37.8% | 35 | 42.7% |
| INTERDISCIP. STUDIES | 0 | 0.0% | 0 | 0.0% | 7 | 58.3% | 4 | 33.3% |
| PARKS & RECREATION | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 100.0% |
| PHILOS, RELIG, THEOL | 5 | 5.3% | 1 | 1.1% | 82 | 87.2% | 5 | 5.3% |
| PHYSICAL SCIENCES | 2 | 0.7% | 5 | 1.7% | 198 | 67.1% | 68 | 23.1% |
| PSYCHOLOGY | 17 | 3.9% | 7 | 1.6% | 397 | 90.6% | 13 | 3.0% |
| PUBLIC AF.& SERVICES | 7 | 7.2% | 3 | 3.1% | 81 | 83.5% | 5 | 5.2% |
| SOCIAL SCIENCES | 14 | 4.2% | 10 | 3.0% | 232 | 70.1% | 61 | 18.4% |
| VISUAL & PERF. ARTS | 1 | 0.7% | 3 | 2.1% | 122 | 85.9% | 12 | 8.5% |
| TOTAL | 109 | 3.4% | 76 | 2.3% | 2,404 | 74.0% | 534 | 16.4% |

Source: NYSED, Information Center on Education.

Table 23
OBSTACLES RATED AS "MAJOR" TO
INCREASE PARTICIPATION IN UNDERREPRESENTED FIELDS

| | MINORITY PARTICIPATION | | | |
|---|---|---|---|---|
| Obstacles | SUNY | CUNY | INDEP. | PROP. |
| Lack Adequate Preparation | 66% | 84% | 54% | 26% |
| Environmental/Self-Image | 44% | 37% | 25% | 22% |
| Lack of Role Models | 51% | 47% | 41% | 13% |
| Lack of Student Interest | 36% | 53% | 26% | 4% |
| Lack of Funds for Counseling | 31% | 42% | 15% | 9% |
| | (N=61) | (N=19) | (N=104-106) | (N=23) |

| | FEMALE PARTICIPATION | | | |
|---|---|---|---|---|
| Obstacles | SUNY | CUNY | INDEP. | PROP. |
| Lack Adequate Preparation | 23% | 53% | 18% | 29% |
| Environmental/Self-Image | 23% | 37% | 17% | 24% |
| Lack of Role Models | 28% | 58% | 23% | 10% |
| Lack of Student Interest | 35% | 47% | 22% | 10% |
| Lack of Funds for Counseling | 26% | 47% | 16% | 10% |
| | (N=57) | (N=19) | (N=95-99) | (N=21) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 24
INSTITUTIONAL ACTIVITIES RATED "EFFECTIVE OR HIGHLY EFFECTUVE" TO INCREASE PARTICIPATION IN UNDERREPRESENTED FIELDS

| Activities | MINORITY PARTICIPATION | | | |
|---|---|---|---|---|
| | SUNY | CUNY | INDEP. | PROP. |
| Increase Financial Aid | 27% | 45% | 50% | 50% |
| More Intensive Academic Advisement | 47% | 70% | 49% | 46% |
| Increased Tutorial Assistance | 55% | 70% | 57% | 46% |
| More Career Counseling | 53% | 45% | 43% | 46% |
| Increased Remediation | 58% | 75% | 44% | 54% |
| Increased Counseling for Self-Image | 38% | 45% | 40% | 38% |
| Cooperative Education Programs | 18% | 40% | 18% | 21% |
| Providing Mentor Faculty | 28% | 45% | 27% | 8% |
| Increased Minority Faculty | 23% | 60% | 22% | 17% |
| | (N=58-60) | (N=20) | (N=104-108) | (N=24) |

| Activities | FEMALE PARTICIPATION | | | |
|---|---|---|---|---|
| | SUNY | CUNY | INDEP. | PROP. |
| Increased Financial Aid | 16% | 45% | 30% | 48% |
| More Intensive Academic Advisement | 43% | 80% | 35% | 50% |
| Increased Tutorial Assistance | 41% | 75% | 29% | 48% |
| More Career Counseling | 48% | 70% | 38% | 50% |
| Increased Remediation | 34% | 60% | 26% | 55% |
| Increased Counseling for Self-Image | 39% | 45% | 33% | 45% |
| Cooperative Education Programs | 20% | 35% | 23% | 18% |
| Providing Mentor Faculty | 36% | 45% | 27% | 17% |
| Increased Women Faculty | 40% | 45% | 48% | 45% |
| Curricula Free of Gender Bias | 32% | 45% | 37% | 36% |
| | (N=55-56) | (N=20) | (N=97-101) | (N=22-23) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

12 percent of baccalaureate degrees, 10 percent of master's degrees, and seven percent of doctoral degrees conferred in 1986 went to blacks and Hispanics.

In certain fields – mathematics, scientific and technical fields, and the professions – underrepresentation is even more pronounced. Blacks and Hispanics are underrepresented in all scientific and technical fields at every degree level (Table 22, pages 33-34). Only nine percent of baccalaureate degrees conferred in the biological sciences, computer science, engineering, the physical sciences, and mathematics were conferred on blacks and Hispanics. The percentage for master's degrees was seven percent and for doctoral degrees, four percent. The underrepresentation in scientific and technical fields stems from both the overall low representation of minority students at the postsecondary level and their concentration in other academic program areas.

Minorities also are underrepresented in first-professional degree programs. Only three percent of Doctor of Medicine degrees went to blacks, and four percent to Hispanics. Less than one percent of degrees in dentistry went to blacks, and two percent went to Hispanics. Only four percent of degrees in law went to blacks, and three percent to Hispanics.

The questionnaire for the Plan asked colleges and universities to identify major obstacles to the recruitment of minorities to underrepresented fields. Significant proportions of institutions reported that these were lack of adequate preparation and lack of role models (Table 23, page 35). Increasing academic and career counseling and tutorial and remedial assistance were reported by significant proportions of institutions as effective activities to increase the recruitment of minorities to underrepresented fields (Table 24).

The Department currently administers scholarship programs to encourage minority students to engage in professional study: the Regents Professional Opportunity Scholarship Program, the Regents Health Care Professional Opportunity Scholarship Program, and the Teacher Opportunity Corps. In addition, the Collegiate Science and Technology Entry Program provides disadvantaged minorities with both student aid and a range of supportive services – academic and career counseling and tutorial assistance – to encourage participation in scientific and technical fields. These are the kinds of supportive activities identified in the questionnaire as effective to encourage minority participation. The Regents strongly support these programs.

- **The Regents will seek increased funding for programs that have been developed to aid disadvantaged minorities in pursuing preprofessional and professional study, including the Regents Professional Opportunity Scholarship Program, the Regents Health Care Professional Opportunity Scholarship Program, the Collegiate Science and Technology Entry Program (CSTEP), and the Teacher Opportunity Corps. They will also seek increased funding for New York's special opportunity programs (SEEK, College Discovery, EOP, and HEOP) sufficient to increase significantly both the levels of support for students and the number of students served (4).**

The Regents take the following additional actions concerning the participation of women and minorities at the doctoral level:

- **The Regents call on each of the State's 41 doctoral institutions, during each of the four years of this Plan, to increase annually by at least one the number of doctoral students who are members of underrepresented minority groups in each discipline in which it offers doctoral study, and to increase annually by at least one the number of female doctoral students in each discipline in which it offers doctoral study and in which women are underrepresented at the doctoral level. In addition, the Regents will advance legislation to establish a program of fellowships to enable women and members of underrepresented minority groups who intend to pursue faculty careers in higher education to enroll in and complete programs leading to doctoral degrees (10).**

- **The Regents concur with the Independent Sector Master Plan's proposal that the State should "convene a special task force to explore ways in which minority enrollment in Ph.D. programs can be increased." They plan to establish a task force to identify ways to increase the representation of underrepresented minority groups in graduate programs and will seek the funding needed to support and staff the deliberations of such a task force (11).**

## 3. The Participation of Students with Disabilities

The Regents policy is that all students who are capable of benefiting from higher education, including those with disabilities, should be afforded an opportunity to pursue higher education. Federal law requires all colleges and universities that receive Federal aid to make their academic programs accessible to persons with disabilities (Section 504 of the Rehabilitation Act of 1973). Colleges and universities are required to make reasonable adjustments to permit such persons to fulfill academic requirements and to ensure that they are not effectively excluded from programs because of the absence of auxiliary services. The Regents encourage colleges and universities in the State to

Table 25
ENROLLMENT TRENDS--STUDENTS WITH DISABILITIES
1981, 1985, 1987--NYS

| | 1981 | 1985 | 1987 | % Change 1981-87 |
|---|---|---|---|---|
| Mobility Impaired | 2,600 | 2,587 | 2,928 | +13% |
| Visually Impaired | 1,034 | 1,286 | 1,290 | +25% |
| Acoustially Impaired | 1,608 | 2,186 | 2,272 | +41% |
| Mutiple Impairment | 244 | 616 | 972 | +298% |
| Learning Disabled | NA | 2,296 | 3,553 | NA |
| Other | 4,059 | 3,690 | 3,642 | -10% |
| Total | 9,545 | 12,661 | 14,657 | +54% |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 26
OBSTACLES RATED AS "MAJOR" IN
EFFORTS TO ASSIST STUDENTS WITH DISABILITIES

| | SUNY | CUNY | INDEP | PROP |
|---|---|---|---|---|
| Funds to Improve Accessibility | 40% | 60% | 34% | 29% |
| Funds for Devices to Assist Disabled | 40% | 40% | 33% | 21% |
| Funds for Accommodations in Instructional Programs | 28% | 35% | 20% | 4% |
| Knowledge of Needs of Disabled | 16% | 15% | 5% | 13% |
| Knowledge of Devices Available to Assist Disabled | 7% | 0 | 3% | 8% |
| Knowledge of Agencies to Assist in Aiding Disabled | 2% | 0 | 3% | 8% |
| | (N=58) | (N=20) | (N=99-100) | (N=24) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

Table 27
SERVICES FOR STUDENTS WITH DISABILITIES
RATED AS FREQUENTLY USED

| | SUNY | CUNY | INDEP | PROP |
|---|---|---|---|---|
| Counseling Services | 47% | 50% | 19% | 22% |
| Placement Services | 15% | 5% | 12% | 39% |
| Tutorial Services | 48% | 50% | 27% | 17% |
| State Office of Voc. Rehab. | 43% | 10% | 21% | 22% |
| Technological Devices to Assist | 15% | 35% | 13% | 0 |
| Readers for Blind & Partial Sighted | 17% | 55% | 18% | 0 |
| | (N=58-60) | (N=20) | (N=100-103) | (N=23) |

Source: NYSED, Bureau of Postsecondary Planning, 1988.

develop plans to improve accessibilty to their facilities for persons with disabilities.

Many colleges have established offices that coordinate and provide campus-wide services to students with disabilities. Such offices may provide tutorial and counseling services, allocate technological devices to assist such students, provide liaison with the Office of Vocational Rehabilitation, coordinate student volunteer services, and offer placement services. The Regents encourage colleges and universities to establish within their organizational structure offices which coordinate services to students with disabilities.

The Department provides services to college students with disabilities through its Office of Vocational Rehabilitation (OVR). OVR provides services to a student whose disability results in a substantial handicap to employment. These services include counseling and guidance to assist the student in choosing an occupational goal and employment placement to assist him or her in securing employment upon degree completion. OVR may assist in the financing of tuition and other related costs for students of limited economic means, as well.

Colleges and universities in New York State are enrolling a growing number of students with disabilities. In 1987, about 14,700 undergraduate and graduate students in New York's public, independent, and proprietary colleges identified themselves as disabled (1.5 percent of all students). This represents a 50 percent increase from the 1981 level (9,500). The greatest percentage increases were among students with learning disabilities, students who are hearing impaired, and students with multiple impairments (Table 25).

The questionnaire for the Plan asked colleges and universities to report major obstacles to the recruitment of students with disabilities (Table 26). Two obstacles were reported by significant proportions of institutions in all sectors: funds to improve accessibility and funds to purchase devices to assist such students. In addition, institutions were asked to identify services to assist students with disabilities that were frequently used. Significant proportions of institutions said that students with disabilities at their institution frequently used counseling and tutorial services. Also, significant proportions of SUNY, independent, and proprietary institutions reported that such students on their campuses frequently used the services of the Office of Vocational Rehabilitation (Table 27). In light of the major obstacles reported by postsecondary institutions, the Regents will take the following action during the period of this Plan:

- **The Regents will advance legislation to fund acquisition by colleges of specialized instruction equipment and learning aids designed to assist persons with disabilities to complete their studies (16).**

According to the *Final Report of the Governor's Task Force on Technology and Disabilities*, "Recent advances in technology offer a wide spectrum of additional opportunities for people with disabilities to live even more productive lives." The report concludes, however, that there is a lack of product development to assist persons with disabilities to live more productive lives and that market information on available products and technology is not reaching persons with disabilities who could benefit by it. In response to this problem, in 1988-89 the Legislature provided $250,000 in funding for a Technology and Disabilities program. Administered by the New York State Science and Technology Foundation, this is a competitive matching grant program directed at firms and nonprofit organizations, including colleges and universities. The program is intended to encourage the movement of technology developed in university and nonprofit settings into the private sector. Its aim is to assist in the development and marketing of technology-based products that can help persons with disabilities live more productive lives. The Regents encourage universities to respond to any request for proposals that the Foundation may issue for this program.

# III
# FACULTY

Faculty constitute the heart of the educational enterprise. Will New York's colleges and universities continue to find and keep the lively, able faculty members they need in order to teach and to advance the frontiers of knowledge? Given the enrollment pattern this Plan projects for the remainder of this century, the numbers of students will decline by about 11 percent to the mid-1990's, then partially rebound. Some decline in demand for new faculty may result, but supply may also decline due to a decrease in the graduate-school age population. Shifts in the popularity of majors complicate this general picture. Certain disciplines have already reported shortages of available faculty members; some analysts have projected more general shortages to come; and the professoriate does not yet reflect New York's (and the nation's) racial/ethnic diversity or balance between the sexes. The Department sought data related to these concerns in the questionnaire that was sent to all higher education institutions in the State in preparation for this Plan. This chapter reflects the responses to this survey, as well as information from other sources.

## Faculty Shortages

In their responses to the questionnaire for the 1988 Statewide Plan, State University, City University, and independent institutions reported moderate to great difficulty recruiting faculty in engineering/engineering technologies, computer science/data processing, business and management, mathematics, physical sciences, and nursing. More than three-quarters of State University campuses that sought education faculty also reported difficulty recruiting in that field. The respondents projected that these difficulties would persist during the period from 1988 to 1992.

These shortages have been developing for some time. Throughout the 1980's, colleges and universities in New York State have reported difficulties in recruiting faculty in engineering, computer science, and certain professional fields such as nursing. In response to surveys conducted by the Department and the State Legislature in 1981-82, engineering schools in the State reported that between seven and eight percent of their budgeted faculty positions were vacant despite efforts to fill them, and that more than half of these positions had been vacant for at least one year. They reported particular difficulty recruiting faculty in mechanical, chemical, electrical/computer, and industrial engineering. About 15 percent of engineering faculty members in 1981-82 were foreign nationals. Information collected for the 1984 Statewide Plan revealed that both City University and State University were finding it difficult to recruit new faculty in science, engineering, and data processing/computer science. In addition, State University reported difficulty recruiting in business (particularly accounting and finance) and most areas of medicine.

Potential faculty shortages have also become a concern to observers on the national scene. In a 1987 report summarized in *The Chronicle of Higher Education* (May 13, 1987), the National Science Foundation expressed concern that "The United States may not have enough scientists and engineers by the late 1990's to fill all the teaching and research positions at universities, let alone maintain the quality of university faculties." This was based on projections of a 1990's decline in the number of persons in their early 20's (traditional graduate-school age) and on the continuing discrepancies between the salaries offered by academic and industrial employers of scientists and engineers. As a step toward addressing this projected shortage, the Foundation conferred 685 NSF Graduate Fellowship awards in 1988, 108 more than in 1987; it plans approximately to double the 1987 number over the next several years (NSF news release, March 1988).

Science and engineering are not the only fields for which faculty shortages have been predicted. A paper presented by Gregory Lozier and Michael Dooris of Pennsylvania State University at the 1987 Annual Meeting of the Association for the Study of Higher Education posed the question: "Is Higher Education Confronting Faculty Shortages?" At about 20 public and independent universities surveyed, the paper reported that 30 to 40 percent of faculty in languages, area studies, humanities and letters, mathematics, life sciences, physical sciences, and engineering/engineering technology were above the age of 50. The average faculty retirement age had held steady around 65 over the past five years. Therefore, the authors projected that these universities would need to replace a large portion of their faculty by the year 2000. In their 1986 book, *American Professors: A National Resource Imperiled*, Ho-

ward Bowen and Jack Schuster also warned of a serious gap in the mid-1990's between faculty supply and demand, unless a larger proportion of highly able young people were attracted to academic careers.

Many colleges and universities now rely on part-time faculty to conduct a significant amount of instruction. Higher Education Data System information shows that, between 1982-83 and 1986-87, the number of full-time faculty at New York's postsecondary institutions grew by 3.8 percent (from 43,618 to 45,267), while the number of part-time faculty grew by 15.4 percent (from 39,485 to 45,564). According to the 1986 Progress Report, between 1982-83 and 1984-85 the proportion of courses taught by part-time faculty increased at 37 percent of the State University colleges and university centers and at all the senior colleges and 86 percent of the community colleges of the City University. Such increases were reported by much smaller numbers of other State University campuses and independent and proprietary institutions. A number of factors have contributed to this pattern: lack of qualified candidates for full-time positions in shortage fields such as those mentioned above; the expertise brought to the classroom by active practitioners in certain fields; and economy and flexibility in administering personnel budgets. If a shortage in new doctorates, and hence new faculty, should develop, one effect on college and university instruction might be a still greater reliance on persons working outside academe hired to teach part-time. Part-time faculty may be devoted to their teaching duties and frequently provide valuable external perspectives; nevertheless, their time and their commitment to the institution are necessarily limited. A strong core of full-time faculty is essential.

Other effects of a possible faculty shortage could be larger class sizes, greater reliance on instructional aids such as computers and audio-visual equipment, and higher faculty salaries. The need to devote more time to teaching, with less time available for research, could retard the advancement of knowledge.

## Faculty Supply and Demand

Since faculty members in most disciplines are recruited largely from the ranks of doctoral-degree recipients, data on enrollments and degrees by discipline provide some further indication of potential problem areas (Tables 28-31, pages 46-49). While overall undergraduate headcount enrollment in the fall of 1975 (805,460) was approximately equal to that in the fall of 1985 (804,832), doctoral enrollment in all fields declined by 9.7 percent (from 28,589 to 25,814), and the number of doctoral degrees awarded declined by six percent (from 3,626 in 1975-76 to 3,408 in 1985-86). In certain fields, the discrepancy was much wider.[1] In communications, while upper-division undergraduate enrollment more than doubled between those years (from 3,354 to 7,072), the number of doctoral degrees went only from 11 to 18. In computer science, undergraduate enrollment rose from 2,206 to 10,903 (394.2 percent), while the number of doctoral degrees went from 26 to 36. In foreign languages, letters, mathematics, the physical sciences, and the social sciences, both undergraduate and doctoral enrollments and degrees decreased substantially between 1975-76 and 1985-86, a pattern which could lead to shortages of new faculty to replace future retirees in these disciplines.

Doctorates awarded in New York are not the only source of new faculty for the State's colleges and universities. According to the U.S. Department of Education's *Digest of Education Statistics*, 922,933 baccalaureates and 34,083 doctorates were conferred nationwide in 1974-75; in 1984-85, 979,477 baccalaureates and 32,943 doctorates were conferred – a 6.1 percent increase in baccalaureates but a 3.3 percent decline in the number of doctorates. In computer and information sciences, the number of baccalaureates increased from 5,033 to 38,878 (672.5 percent) during this period, while the number of doctorates went from 213 to 248 (16.4 percent). In certain fields, there is a shortage both nationally and in the State.

Demographic projections offer little prospect of an increase in doctorates for the remainder of the century. Almost all graduate students fall into the age categories 20-to-24 and 25-to-34. Table 32 (page 50) shows that between 1985 and 2000, the number of New Yorkers aged 20 to 24 is projected to decline by nearly 30 percent; the number aged 25 to 34 is projected to decline by about 13 percent. Demographic trends are one element influencing supply, but not the only element; doctoral enrollments and degrees fell from 1975 to 1985, even while the population in these age groups was increasing. Academic careers have declined in attractiveness in recent years. In many fields, salaries have not kept pace with salaries outside academe – even non-Ph.D. salaries; the much-publicized "Ph.D. glut" of the 1970's and 1980's is just beginning to show signs of abating in some disciplines; graduate study is costly, and students without fellowships or assistantships often find it necessary to rely on loans. These factors must be considered in any efforts to avert a further decline in doctorates, and hence in the supply of new faculty, in the next decade.

## Potential Shortage: Conclusions and Recommendations

Regarding the possibility of general faculty shortages in the future, the signals are mixed. Shortages in certain disciplines, however, are evident already and are projected to

[1] Undergraduate enrollment by discipline is available for the upper-division – juniors and seniors – only.

continue. In order to address this current need, and to position New York's higher education community optimally in case more general shortages develop, the Regents take the following action:

- **The Regents direct the Department to examine faculty supply and demand issues, identifying additional disciplines in which shortages are anticipated. The Regents will seek enactment of bills to establish (1) State-supported fellowships for doctoral study in key fields and (2) State-supported teaching assistantships for persons studying for doctorates in engineering (44).**

Further, to address existing problems of faculty supply and demand, the Regents reaffirm the following recommendations from their 1984 Statewide Plan for the Development of Postsecondary Education in New York State:

- In view of the continued importance in this decade of doctoral study and research in engineering, computer science, mathematics, and the physical and biological sciences, the Regents recommend that the Governor propose to the Legislature the establishment of fellowship and scholarship programs to attract additional numbers of students to full-time doctoral study in those disciplines.

- The Regents recommend that the Governor give consideration to implementing programs suggested by the sectors to assist them in their efforts to balance faculty supply and student demand, which also would assist in increasing the numbers of women and members of minority groups at the associate professor and professor ranks, or who achieve tenure. Among the programs proposed are summertime research grants for faculty; creation of shared faculty positions; support for faculty retraining in high demand fields; and support for faculty exchanges with business, industry, schools, and government agencies.

## Minority Faculty

Changing racial/ethnic patterns in the population, outlined elsewhere in this Plan, also affect faculty supply and demand. Although the proportion of minorities in the State's population is increasing (from nine percent in 1960 to 23 percent in 1986), the proportion of minority faculty members remains small. In 1981-82 (the first academic year for which such data are available), colleges and universities reported to the Department that of the 39,729 full-time instructional faculty of known racial/ethnic origin (96.8 percent of all such faculty), 3.5 percent were black (non-Hispanic), 1.9 percent Hispanic, 0.1 percent native American, 3.5 percent Asian, 1.2 percent nonresident alien, and 89.8 percent were white (non-Hispanic). In 1985-86, the changes from 1981-82 were insignificant; of 39,895 full-time instructional faculty,[2] 2.0 percent were Hispanic, 3.9 percent Asian, 1.4 percent nonresident alien, and 89.1 percent white; the percentages of blacks and native Americans were unchanged.

One hundred fifty-four respondents to the questionnaire for this Plan with faculty tenure systems reported a virtually unchanged racial/ethnic distribution among their more than 36,000 full-time faculty in 1986-87. Essentially the same distribution prevailed among some 23,000 tenured faculty. Of about 13,000 nontenured faculty, slightly larger percentages were black, Hispanic, and Asian, while about 85 percent were white. The percentages were similar in all sectors of higher education, with one exception: City University, with data for 20 campuses, reported the largest proportion of minority full-time faculty among the three sectors (some 15 percent black and Hispanic), with 81 percent white and the remainder mainly Asian.[3]

In 1986-87, according to the questionnaire respondents, about three percent of associate professors and two percent of full professors were black. Hispanics accounted for approximately two percent of associate and full professors; Asians, for about four percent in each rank; and whites, for about 90 percent of associate professors and 93 percent of professors. Between 1982-83 and 1986-87, at the colleges and universities responding to this part of the questionnaire, the number of black associate and full professors increased by about eight percent; the number of Hispanics, by 19 percent; and the number of whites, by about six percent.

The proportions of full-time instructional faculty given above are in agreement with national percentages for the fall of 1983, reported in the 1987 *Digest of Educational Statistics*. Of a nationwide total of 470,673 such faculty in that year, 90.4 percent were white, 4.1 percent black, 1.6 percent Hispanic, 3.6 percent Asian, and 0.3 percent native American. In her 1988 study, *Increasing Minority Faculty: An Elusive Goal*, Shirley Vining Brown used statistics from the National Research Council's annual Survey of Earned Doctorates to analyze patterns in the supply of new faculty.[4] These data showed that between 1975 and 1986, the num-

[2] This was 98.6 percent of the 40,462 full-time instructional faculty in 1985-86. This figure does not include teaching assistants and teaching associates.

[3] The City University of New York reported data on faculty by race/ethnic category and gender for the fall of 1987.

[4] A research report of the Minority Graduate Education Project, jointly sponsored by the Graduate Record Examinations Board and Educational Testing Service.

ber of blacks earning Ph.D.'s declined about 18 percent (from 999 to 820), while the number of Hispanics and Asian-Americans increased by 87 percent and 84 percent, respectively (Brown, p. 5). Based on this and other information, Brown concluded that blacks held "the most fragile status of all minorities" in the doctoral pool and in academe:

> * The Black doctorate pool is shrinking: in absolute numbers and proportions, the Black doctoral pool has declined to its lowest point since 1975 and shows no signs of recovery.
>
> * In addition to the shrinking, a smaller percentage of the Black doctorate pool is choosing academic careers: even though academe still claims the largest share, more Black Ph.D.s are opting for careers in business and industry.
>
> * Blacks have the lowest faculty progression and retention rates in academe: they are promoted and tenured at lower rates than any other group. Thus, the problem of underrepresentation of Black faculty is one of supply and flow into and through the academic pipeline. (Brown, p. 25)
>
> By 2020, minority students will comprise about 35 percent of the total U.S. student population, with Black and Hispanic students making up the largest share of this group. Current policies and practices are not working to expand the Black and Hispanic doctorate candidate pools and therefore will not meet the mentoring and role-model needs of the changing mix of students anticipated in higher education in the future. (Brown, p. 27)

If the numbers of minority faculty members are to increase, more minority students must be attracted to graduate study. Blacks and Hispanics comprise 23 percent of the population of New York State. In 1984-85, blacks and Hispanics received 17.7 percent of the associate degrees granted in the State, 11.9 percent of the baccalaureates, 9.1 percent of the master's degrees, 6.6 percent of the first-professional degrees, and 5.7 percent of the doctorates. As the level of degree advances, the proportion earned by minorities decreases. Within undergraduate degrees, blacks and Hispanics generally have received even smaller proportions of degrees in the humanities, the natural sciences, and engineering. The same is true at the graduate level, with the addition of degrees in business (see Table 22 in Chapter II, pages 33-44). These patterns have been noted nationally and in New York State for some years, and the Regents, like other authorities in education and the professions, have concluded that the problem must be remedied by actions all along the educational "pipeline." For colleges and universities, this means (along with collaboration with elementary and secondary schools as this Plan recommends elsewhere) recruiting more underrepresented minority students and retaining them once they have enrolled.

As Shirley Vining Brown indicates, the presence of minority faculty members (and administrators) on college campuses is important, not only as a matter of equal opportunity in academic careers, but also as a factor in the educational experiences of minority students. On the Plan questionnaire, 76 percent of respondents reported using "visible minority faculty and administrators" as a strategy to recruit minority students.[5] Of these, 45 percent found the strategy effective or highly effective and 46 percent found it moderately effective; only nine percent found it ineffective. A smaller number of respondents – 46 percent – reported using an "increased number of minority faculty" to attract minority students into fields of study where they are underrepresented. Of those who used the strategy, 55 percent found it effective or highly effective, 42 percent found it moderately effective, and just three percent found it ineffective. Only half the respondents used "increased number of minority faculty" as a strategy to *retain* minority students, once they were enrolled. Of these, 47 percent found it effective or highly effective, 44 percent found it moderately effective, and only nine percent found it ineffective. Twenty-one percent of responding institutions said that a lack of minority faculty and administrative staff presented a major obstacle to retaining minority students; 36 percent considered it a minor obstacle; 28 percent did not consider it an obstacle to retention; and 15 percent did not know or did not respond to this part of the question.

## Women Faculty

Women also are still underrepresented on college and university faculties. In the fall of 1986, women made up 56 percent of total undergraduate degree-credit enrollment in New York State (444,713 out of 798,594). In 1985-86, they earned 53 percent of baccalaureates conferred in the State, 56 percent of the master's degrees, 36 percent of the first-professional degrees, and 41 percent of the doctorates (see Table 21 in Chapter II, page 32). However, in 1986-87 women accounted for only 30 percent of all full-time faculty in the State. At the 154 institutions responding to this question on the Plan survey women were about 25 percent of tenured and 39 percent of nontenured faculty. In the upper ranks, there were fewer women (about 26 percent of associate professors and 16 percent of professors). But the number of women was increasing at a greater rate in these higher ranks. Between 1982-83 and 1986-87, the number of

[5] There were 215 respondents to this question.

female associate and full professors grew by about 12 and 23 percent, respectively, while the number of male associate professors remained essentially unchanged and the number of male full professors increased by about 10 percent. Again, variation by field of study complicates the problem of underrepresentation; as Tables 33 (page 51) and 21 show, in 1985-86 women earned smaller proportions of degrees at all levels in the physical sciences, architecture, computer and information sciences, and engineering; in agriculture and business above the baccalaureate level; and in most fields at the first-professional and doctoral levels. But women received more than a majority of the degrees conferred in education, arts, foreign languages, home economics, letters, library science, nursing, and psychology, and in public affairs at the master's level.

As with minorities, then, increasing the proportion of women faculty entails increasing the proportion of women earning doctorates. Part of this challenge is to attract more women into fields of study in which they are underrepresented at all levels. In this regard, two-thirds of respondents to the Plan questionnaire reported using an "increased number of women faculty" to attract women into such fields. Of these, 65 percent found this strategy effective or highly effective, 27 percent found it moderately effective, and only seven percent found it ineffective. A second part of the challenge is to attract more women into doctoral study and faculty careers. This requires meeting the same challenges described earlier: assisting with the cost of graduate study and increasing the attractiveness of faculty careers.

## Minority and Women Faculty: The Future

If the potential faculty shortages discussed earlier in this paper materialize, how might they affect colleges' and universities' affirmative-action efforts in hiring? Two alternative scenarios can be projected. If current trends continue (if minorities and women continue to make up a small proportion of graduate enrollments and earn a small proportion of doctoral degrees), the difficulties institutions are encountering in their affirmative-action efforts will be exacerbated. The vicious cycle will continue: with fewer minority and women faculty as role models and mentors, fewer minorities and women will embark upon higher education or persevere to doctorates and faculty careers.

We must break this cycle, for the sake of justice and for the future of higher education's role in society. Shirley Vining Brown makes a number of recommendations in *Increasing Minority Faculty* to increase the supply of minority Ph.D.s: greater attention to improving black and Hispanic enrollment as part of the political agenda; better pre-college preparation for blacks and Hispanics; development of state policies for financing minority students' graduate work, including "forgiveness" clauses if candidates teach at the college level; measures to strengthen traditionally black institutions of higher education, and to promote consortia between them and universities offering doctoral programs; more national voluntary programs providing portable graduate fellowships for minorities planning academic careers; and programs, beginning early in the educational pipeline, to shift black graduate students' career interests to high-growth fields such as science and technology. To attract and retain minority faculty, she suggests aggressive affirmative-action strategies such as incentives for departments that succeed in recruiting minorities; a combination of programs and salary incentives to compete with business and industry for new minority Ph.D.'s, such as academic centers focusing on minority culture, history, and policy issues; and institutional initiatives to retain minority faculty, such as postdoctoral appointments and support for junior faculty to build research and publication records (Brown, p. 28).

The alternative scenario, then, is to take steps such as these to enhance affirmative action in faculty hiring. Then projected shortages, if they materialize, will provide further openings for minority candidates. In New York, the Regents, with the help of the Governor and Legislature, have initiated efforts to increase the supply of minorities entering higher education and the professions. These efforts start with attempts to reduce the number of secondary-school dropouts (among whom blacks and Hispanics are overrepresented). More particularly directed toward enrollment and retention in higher education are the Science and Technology Entry Program (STEP), the Collegiate Science and Technology Entry Program (CSTEP), and the Professional and Health Care Opportunity Scholarships. If these efforts are successful, they have the potential to increase the enrollment of minorities in scientific and technical undergraduate and graduate programs.

## Minority and Women Faculty: Conclusion and Recommendations

But these existing efforts are aimed at increasing the representation of minorities in the licensed professions, not at redressing the imbalance on college and university faculties. To that end, in this Plan the Regents adopt the following further actions. By helping to boost the entry and retention of previously excluded talent, these measures would serve two ends: they would help assure a continuing supply of qualified college and university faculty and they would assure that that faculty better reflected the general population and the student body of higher education into the 21st Century.

- **Faculty serve as role models. They are important in attracting and retaining students, including women and**

minority students. Therefore, the Regents call for greater efforts by colleges and universities to increase the representation of women and underrepresented minorities on their faculties to serve as role models among other positive results caused by diversifying the faculty. The Department will identify programs that have been successful in advancing this objective and will propose legislation to support such programs (9).

- The Regents call on each of the State's 41 doctoral institutions, during each of the four years of this Plan, to increase annually by at least one the number of doctoral students who are members of underrepresented minority groups in each discipline in which it offers doctoral study, and to increase annually by at least one the number of female doctoral students in each discipline in which it offers doctoral study and in which women are underrepresented at the doctoral level. In addition, the Regents will advance legislation to establish a program of fellowships to enable women and members of underrepresented minority groups who intend to pursue faculty careers in higher education to enroll in and complete programs leading to doctoral degrees (10).

- The Regents will advance legislation to establish a program of grants to colleges and universities in New York State to enhance the resources available to untenured or non-tenure track faculty who are women or members of underrepresented minority groups. The resources could be used for supporting research projects, providing released time for pursuit of a terminal degree, or supporting other activities proposed by the institution and the untenured women or minority faculty members that are designed to improve the faculty member's prospects for tenure (42).

- The Regents will propose legislation to establish a program under which the State will pay part or all of the educational loans of qualified women and members of underrepresented minority groups who accept faculty positions at institutions of higher education in New York State (43).

Table 28

HEADCOUNT ENROLLMENT
BY MAJOR SUBJECT AREA AND LEVEL OF STUDY
NEW YORK STATE, FALL 1975, 1980, 1985

| FIELD | FALL 1975 | | | FALL 1980 | | | FALL 1985 | | |
|---|---|---|---|---|---|---|---|---|---|
| | UPPER-DIV. UNDERGRAD. | MASTER'S | DOCTORAL | UPPER-DIV. UNDERGRAD. | MASTER'S | DOCTORAL | UPPER-DIV. UNDERGRAD. | MASTER'S | DOCTORAL |
| AGRIC.& NAT.RESRCES. | 1,318 | 324 | 209 | 1,291 | 289 | 284 | 1,284 | 278 | 304 |
| ARCH.&ENVIRON.DESIGN | 3,047 | 1,145 | 81 | 3,282 | 917 | 42 | 3,132 | 1,098 | 31 |
| AREA STUDIES | 668 | 262 | 79 | 502 | 186 | 26 | 454 | 298 | 19 |
| BIO./LIFE SCIENCE | 12,040 | 2,069 | 2,420 | 8,960 | 1,433 | 2,554 | 8,032 | 1,532 | 2,574 |
| BUSINESS & MGMT. | 23,674 | 20,066 | 582 | 40,384 | 23,258 | 647 | 45,101 | 24,566 | 570 |
| COMMUNICATIONS | 3,354 | 1,072 | 81 | 5,883 | 1,384 | 109 | 7,072 | 1,548 | 120 |
| COMPUTER SCIENCE | 2,206 | 1,072 | 329 | 4,993 | 2,061 | 357 | 10,903 | 4,660 | 629 |
| EDUCATION | 18,964 | 34,316 | 5,537 | 12,468 | 18,715 | 4,853 | 10,724 | 18,280 | 3,809 |
| ENGINEERING | 9,915 | 4,579 | 1,522 | 14,164 | 3,829 | 1,599 | 16,478 | 4,956 | 2,302 |
| FINE & AP. ARTS | 11,386 | 3,510 | 950 | 11,378 | 3,818 | 1,055 | 10,658 | 4,111 | 973 |
| FOREIGN LANGS. | 3,645 | 1,257 | 1,051 | 2,144 | 762 | 792 | 1,855 | 788 | 614 |
| HEALTH PROFESSIONS | 13,638 | 3,737 | 448 | 17,426 | 6,171 | 631 | 13,964 | 6,599 | 783 |
| HOME ECONOMICS | 2,436 | 331 | 136 | 1,934 | 646 | 142 | 1,683 | 462 | 155 |
| LAW | 108 | 1,068 | 8 | 50 | 1,270 | 9 | 36 | 1,053 | 0 |
| LETTERS | 12,134 | 3,882 | 3,069 | 8,884 | 2,362 | 2,342 | 9,174 | 2,771 | 2,080 |
| LIBRARY SCIENCE | 0 | 2,357 | 41 | 1 | 1,191 | 64 | 0 | 1,107 | 40 |
| MATHEMATICS | 3,725 | 1,233 | 1,001 | 2,609 | 575 | 816 | 3,816 | 956 | 810 |
| PHYSICAL SCIENCES | 5,664 | 1,087 | 2,247 | 4,512 | 942 | 2,057 | 3,891 | 1,046 | 2,317 |
| PSYCHOLOGY | 15,568 | 2,434 | 2,442 | 9,705 | 1,856 | 2,896 | 8,866 | 2,218 | 2,846 |
| PUBLIC AF.& SERVICES | 4,431 | 6,870 | 656 | 5,606 | 7,483 | 575 | 4,707 | 6,942 | 564 |
| SOCIAL SCIENCES | 27,152 | 4,852 | 4,643 | 23,192 | 4,322 | 3,978 | 20,508 | 4,387 | 3,399 |
| THEOLOGY | 297 | 641 | 209 | 167 | 630 | 215 | 116 | 658 | 296 |
| INTERDIS. STUDIES | 12,533 | 1,960 | 493 | 9,233 | 1,496 | 364 | 7,489 | 1,984 | 510 |
| OTHER | 14,317 | 1,487 | 355 | 16,179 | 1,169 | 68 | 16,863 | 738 | 69 |
| TOTAL | 202,220 | 101,611 | 28,589 | 204,947 | 86,765 | 26,475 | 206,806 | 93,036 | 25,814 |
| ALL UNDERGRADUATES, UPPER- & LOWER-DIV | 805,460 | | | 804,406 | | | 804,832 | | |

Source: NYSED, Information Center on Education.

Table 29

DEGREES GRANTED
BY MAJOR SUBJECT AREA AND LEVEL OF STUDY
NEW YORK STATE, 1975-76, 1980-81, 1985-86

| FIELD | 1975-76 BACHELOR'S | 1975-76 MASTER'S | 1975-76 DOCTORAL | 1980-81 BACHELOR'S | 1980-81 MASTER'S | 1980-81 DOCTORAL | 1985-86 BACHELOR'S | 1985-86 MASTER'S | 1985-86 DOCTORAL |
|---|---|---|---|---|---|---|---|---|---|
| AGRIC.& NAT.RESRCES. | 652 | 125 | 55 | 591 | 129 | 55 | 663 | 127 | 61 |
| ARCH.&ENVIRON.DESIGN | 1,074 | 382 | 18 | 1,046 | 305 | 12 | 1,043 | 407 | 11 |
| AREA STUDIES | 374 | 98 | 8 | 305 | 71 | 2 | 274 | 80 | 4 |
| BIO./LIFE SCIENCE | 5,254 | 690 | 384 | 4,034 | 697 | 401 | 3,496 | 608 | 378 |
| BUSINESS & MGMT. | 10,776 | 5,437 | 87 | 16,041 | 6,497 | 53 | 19,216 | 6,589 | 86 |
| COMMUNICATIONS | 1,641 | 459 | 11 | 2,499 | 561 | 16 | 3,472 | 601 | 18 |
| COMPUTER SCIENCE | 702 | 302 | 26 | 1,728 | 518 | 23 | 4,675 | 1,463 | 36 |
| EDUCATION | 10,007 | 15,557 | 662 | 5,559 | 8,905 | 642 | 4,804 | 7,178 | 493 |
| ENGINEERING | 3,976 | 1,747 | 273 | 5,750 | 1,758 | 250 | 6,752 | 1,923 | 319 |
| FINE & AP. ARTS | 5,037 | 1,391 | 101 | 4,911 | 1,339 | 105 | 4,709 | 1,465 | 143 |
| FOREIGN LANGS. | 1,928 | 671 | 136 | 1,144 | 377 | 67 | 902 | 261 | 72 |
| HEALTH PROFESSIONS | 5,432 | 1,459 | 45 | 6,698 | 2,107 | 109 | 5,622 | 2,000 | 110 |
| HOME ECONOMICS | 1,229 | 134 | 32 | 988 | 231 | 32 | 750 | 200 | 31 |
| LAW | 31 | 516 | 1 | 0 | 491 | 6 | 0 | 485 | 3 |
| LETTERS | 6,402 | 1,715 | 346 | 4,591 | 990 | 268 | 4,727 | 1,138 | 267 |
| LIBRARY SCIENCE | 2 | 1,201 | 6 | 0 | 516 | 8 | 2 | 428 | 3 |
| MATHEMATICS | 1,880 | 658 | 107 | 1,177 | 349 | 85 | 1,616 | 368 | 95 |
| PHYSICAL SCIENCES | 2,103 | 690 | 349 | 1,928 | 458 | 298 | 1,730 | 513 | 316 |
| PSYCHOLOGY | 6,292 | 961 | 349 | 4,870 | 768 | 314 | 4,447 | 800 | 477 |
| PUBLIC AF.& SERVICES | 2,812 | 2,494 | 59 | 2,695 | 2,939 | 93 | 2,153 | 2,649 | 70 |
| SOCIAL SCIENCES | 14,221 | 2,014 | 494 | 12,506 | 1,611 | 364 | 10,439 | 1,466 | 370 |
| THEOLOGY | 68 | 194 | 46 | 45 | 258 | 41 | 18 | 213 | 33 |
| INTERDIS. STUDIES | 3,653 | 1,134 | 31 | 4,654 | 572 | 10 | 5,203 | 664 | 12 |
| OTHER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 85,546 | 40,029 | 3,626 | 83,760 | 32,447 | 3,254 | 86,713 | 31,626 | 3,408 |

Source: NYSED, Information Center on Education.

Table 30

ENROLLMENTS
CHANGE, 1975-76 - 1985-86

| FIELD | UPPER-DIV. UNDERGRAD. | | MASTER'S | | DOCTORAL | |
|---|---|---|---|---|---|---|
| | NO. | PCT. | NO. | PCT. | NO. | PCT. |
| AGRIC.& NAT.RESRCES. | -34 | -2.6% | -46 | -14.2% | 95 | 45.5% |
| ARCH.&ENVIRON.DESIGN | 85 | 2.8% | -47 | -4.1% | -50 | -61.7% |
| AREA STUDIES | -214 | -32.0% | 36 | 13.7% | -60 | -75.9% |
| BIO./LIFE SCIENCE | -4008 | -33.3% | -537 | -26.0% | 154 | 6.4% |
| BUSINESS & MGMT. | 21427 | 90.5% | 4500 | 22.4% | -12 | -2.1% |
| COMMUNICATIONS | 3718 | 110.9% | 476 | 44.4% | 39 | 48.1% |
| COMPUTER SCIENCE | 8697 | 394.2% | 3588 | 334.7% | 300 | 91.2% |
| EDUCATION | -8240 | -43.5% | -16036 | -46.7% | -1728 | -31.2% |
| ENGINEERING | 6563 | 66.2% | 377 | 8.2% | 780 | 51.2% |
| FINE & AP. ARTS | -728 | -6.4% | 601 | 17.1% | 23 | 2.4% |
| FOREIGN LANGS. | -1790 | -49.1% | -469 | -37.3% | -437 | -41.6% |
| HEALTH PROFESSIONS | 326 | 2.4% | 2862 | 76.6% | 335 | 74.8% |
| HOME ECONOMICS | -753 | -30.9% | 131 | 39.6% | 19 | 14.0% |
| LAW | -72 | -66.7% | -15 | -1.4% | -8 | -100.0% |
| LETTERS | -2960 | -24.4% | -1111 | -28.6% | -989 | -32.2% |
| LIBRARY SCIENCE | 0 | 0.0% | -1250 | -53.0% | -1 | -2.4% |
| MATHEMATICS | 91 | 2.4% | -277 | -22.5% | -191 | -19.1% |
| PHYSICAL SCIENCES | -1773 | -31.3% | -41 | -3.8% | 70 | 3.1% |
| PSYCHOLOGY | -6702 | -43.0% | -216 | -8.9% | 404 | 16.5% |
| PUBLIC AF.& SERVICES | 276 | 6.2% | 72 | 1.0% | -92 | -14.0% |
| SOCIAL SCIENCES | -6644 | -24.5% | -465 | -9.6% | -1244 | -26.8% |
| THEOLOGY | -181 | -60.9% | 17 | 2.7% | 87 | 41.6% |
| INTERDIS. STUDIES | -5044 | -40.2% | 24 | 1.2% | 17 | 3.4% |
| OTHER | 2546 | 17.8% | -749 | -50.4% | -286 | -80.6% |
| TOTAL | 4586 | 2.3% | -8575 | -8.4% | -2775 | -9.7% |

Data Source: NYSED, Information Center on Education.

Table 31

DEGREES
CHANGE, 1975-76 - 1985-86

| FIELD | BACHELOR'S | | MASTER'S | | DOCTORAL | |
|---|---|---|---|---|---|---|
| | NO. | PCT. | NO. | PCT. | NO. | PCT. |
| AGRIC.& NAT.RESRCES. | 11 | 1.7% | 2 | 1.6% | 6 | 10.9% |
| ARCH.&ENVIRON.DESIGN | -31 | -2.9% | 25 | 6.5% | -7 | -38.9% |
| AREA STUDIES | -100 | -26.7% | -18 | -18.4% | -4 | -50.0% |
| BIO./LIFE SCIENCE | -1758 | -33.5% | -82 | -11.9% | -6 | -1.6% |
| BUSINESS & MGMT. | 8440 | 78.3% | 1152 | 21.2% | -1 | -1.1% |
| COMMUNICATIONS | 1831 | 111.6% | 142 | 30.9% | 7 | 63.6% |
| COMPUTER SCIENCE | 3973 | 566.0% | 1161 | 384.4% | 10 | 38.5% |
| EDUCATION | -5203 | -52.0% | -8379 | -53.9% | -169 | -25.5% |
| ENGINEERING | 2776 | 69.8% | 176 | 10.1% | 46 | 16.8% |
| FINE & AP. ARTS | -328 | -6.5% | 74 | 5.3% | 42 | 41.6% |
| FOREIGN LANGS. | -1026 | -53.2% | -410 | -61.1% | -64 | -47.1% |
| HEALTH PROFESSIONS | 190 | 3.5% | 541 | 37.1% | 65 | 144.4% |
| HOME ECONOMICS | -479 | -39.0% | 66 | 49.3% | -1 | -3.1% |
| LAW | -31 | -100.0% | -31 | -6.0% | 2 | 200.0% |
| LETTERS | -1675 | -26.2% | -577 | -33.6% | -79 | -22.8% |
| LIBRARY SCIENCE | 0 | 0.0% | -773 | -64.4% | -3 | -50.0% |
| MATHEMATICS | -264 | -14.0% | -290 | -44.1% | -12 | -11.2% |
| PHYSICAL SCIENCES | -373 | -17.7% | -177 | -25.7% | -33 | -9.5% |
| PSYCHOLOGY | -1845 | -29.3% | -161 | -16.8% | 128 | 36.7% |
| PUBLIC AF.& SERVICES | -659 | -23.4% | 155 | 6.2% | 11 | 18.6% |
| SOCIAL SCIENCES | -3782 | -26.6% | -548 | -27.2% | -124 | -25.1% |
| THEOLOGY | -50 | -73.5% | 19 | 9.8% | -13 | -28.3% |
| INTERDIS. STUDIES | 1550 | 42.4% | -470 | -41.4% | -19 | -61.3% |
| OTHER | | | | | | |
| TOTAL | 1167 | 1.4% | -8403 | -21.0% | -218 | -6.0% |

Data Source: NYSED, Information Center on Education.

Table 32

1985 POPULATION PROJECTIONS--NEW YORK STATE
1980 THROUGH 2000

| YEAR | AGE 20-24 | PCT CHANGE FROM 1985 | AGE 25-34 | PCT CHANGE FROM 1985 |
|---|---|---|---|---|
| Actual | | | | |
| 1980 | 1,519,946 | | 2,780,215 | |
| 1985 | 1,579,195 | | 2,911,632 | |
| Projected | | | | |
| 1990 | 1,333,981 | -15.5% | 2,890,350 | -0.7% |
| 1995 | 1,204,806 | -23.7% | 2,817,750 | -3.2% |
| 2000 | 1,114,599 | -29.4% | 2,534,600 | -12.9% |

Data source: NYS Department of Economic Development.

Table 33
BACHELOR'S AND HIGHER DEGREES CONFERRED IN NEW YORK STATE
BY SEX AND MAJOR SUBJECT AREA, 1985-86

| Subject Area | Bachelor's | | | Master's | | | First-Professional | | | Doctoral | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total |
| Agriculture | 348 | 315 | 663 | 90 | 37 | 127 | --- | --- | --- | 49 | 12 | 61 |
| Architecture | 692 | 351 | 1,043 | 262 | 145 | 407 | --- | --- | --- | 7 | 4 | 11 |
| Area Studies | 96 | 178 | 274 | 33 | 47 | 80 | --- | --- | --- | 1 | 3 | 4 |
| Biological Sciences | 1,823 | 1,673 | 3,496 | 262 | 346 | 608 | --- | --- | --- | 233 | 145 | 378 |
| Business & Mgmt. | 9,832 | 9,384 | 19,216 | 4,285 | 2,304 | 6,589 | --- | --- | --- | 64 | 22 | 86 |
| Communications | 1,510 | 1,962 | 3,472 | 261 | 340 | 601 | --- | --- | --- | 9 | 9 | 18 |
| Computer/Info. Sci. | 2,937 | 1,738 | 4,675 | 988 | 475 | 1,463 | --- | --- | --- | 31 | 5 | 36 |
| Education | 806 | 3,998 | 4,804 | 1,470 | 5,708 | 7,178 | --- | --- | --- | 209 | 284 | 493 |
| Engineering | 5,830 | 922 | 6,752 | 1,690 | 233 | 1,923 | --- | --- | --- | 296 | 23 | 319 |
| Fine & Appl. Arts | 1,850 | 2,859 | 4,709 | 649 | 816 | 1,465 | --- | --- | --- | 79 | 64 | 143 |
| Foreign Languages | 204 | 698 | 902 | 71 | 190 | 261 | --- | --- | --- | 31 | 41 | 72 |
| Health Professions: | 736 | 4,886 | 5,622 | 331 | 1,669 | 2,000 | 1,844 | 855 | 2,699 | 27 | 83 | 110 |
| Dentistry | --- | --- | --- | --- | --- | --- | 234 | 56 | 290 | --- | --- | --- |
| Medicine | --- | --- | --- | --- | --- | --- | 1,189 | 577 | 1,766 | * | * | * |
| Nursing | * | * | * | * | * | * | --- | --- | --- | * | * | * |
| Optometry | --- | --- | --- | --- | --- | --- | 29 | 22 | 51 | --- | --- | --- |
| Osteopathic Med. | --- | --- | --- | --- | --- | --- | 82 | 25 | 107 | --- | --- | --- |
| Pharmacy | * | * | * | * | * | * | 10 | 9 | 19 | * | * | * |
| Podiatry | --- | --- | --- | --- | --- | --- | 99 | 30 | 129 | --- | --- | --- |
| Veterinary Med. | --- | --- | --- | --- | --- | --- | 38 | 45 | 83 | * | * | * |
| Chiropractic | --- | --- | --- | --- | --- | --- | 163 | 91 | 254 | --- | --- | --- |
| Other | * | * | * | * | * | * | --- | --- | --- | * | * | * |
| Home Economics | 91 | 659 | 750 | 22 | 178 | 200 | --- | --- | --- | 11 | 20 | 31 |
| Law | 0 | 0 | 0 | 361 | 124 | 485 | 2,234 | 1,655 | 3,889 | 3 | 0 | 3 |
| Letters | 1,791 | 2,936 | 4,727 | 383 | 755 | 1,138 | --- | --- | --- | 126 | 141 | 267 |
| Library Science | 1 | 1 | 2 | 101 | 327 | 428 | --- | --- | --- | 1 | 2 | 3 |
| Mathematics | 856 | 760 | 1,616 | 208 | 160 | 368 | --- | --- | --- | 77 | 18 | 95 |
| Physical Sciences | 1,257 | 473 | 1,730 | 376 | 137 | 513 | --- | --- | --- | 271 | 45 | 316 |
| Psychology | 1,221 | 3,226 | 4,447 | 267 | 533 | 800 | --- | --- | --- | 205 | 272 | 477 |
| Public Affairs | 866 | 1,287 | 2,153 | 722 | 1,927 | 2,649 | --- | --- | --- | 36 | 34 | 70 |
| Social Sciences | 5,566 | 4,873 | 10,439 | 811 | 655 | 1,466 | --- | --- | --- | 230 | 140 | 370 |
| Theology | 9 | 9 | 18 | 121 | 92 | 213 | 174 | 93 | 267 | 24 | 9 | 33 |
| Interdisc. Studies | 2,487 | 2,716 | 5,203 | 267 | 397 | 664 | --- | --- | --- | 8 | 4 | 12 |
| TOTAL | 40,809 | 45,904 | 86,713 | 14,031 | 17,595 | 31,626 | 6,096 | 3,458 | 9,554 | 2,028 | 1,380 | 3,408 |

* Data not available for 1985-86.

Source: NYSED, Information Center on Education.

# IV
# TUITION RATES: TWO ASPECTS

As the 1984 Statewide Plan directed, the Department has issued two series of reports, one on various fiscal indicators for postsecondary education in the State and one on cost (to the student) of college attendance and student financial aid. The Regents directed the preparation of these reports because of their concern over the impact of the rapidly increasing costs of higher education, particularly on the disadvantaged. These costs affect student access and choice and are the starting points for the Regents deliberations on student aid policy.

Generally, the largest single item in the cost of attending college is tuition. Tuition rates are the link between the two series of reports. The Fiscal Indicators reports concentrate on the expenditure patterns and trends of colleges and the various sources from which colleges receive revenue to fund those expenditures. The relationship between expenditures and revenue results in given tuition rates. The Net Cost reports focus on trends in the costs of attending college and in the various sources of funding available to students and their families to pay those costs.

As a result of the work since 1984, this Plan, insofar as it relates to fiscal concerns, focuses on tuition policies and rates and related matters. Colleges were asked to address policies for establishing tuition rates as well as to project estimated tuition rates for the next four years. In addition, data were solicited on institutional student aid, i.e., grants given by a college out of its own funds.

Based on the responses to those requests, this chapter addresses two different topics related to tuition rates. For the public systems, the topic is whether there should be a tuition policy in each. For the independent sector, it analyzes the implications of the substantial growth in the student aid colleges provide from their own funds.

As dissimilar as these two topics appear, the sectors maintain that the current situation in relation to these issues results from insufficient governmental student aid. This demonstrates that the cause-and-effect relationship between cost of attendance and student aid is more difficult than ever to discern. New York State's tradition of supporting higher education heavily both through direct support to colleges and through student aid makes their relationship extremely complex.

It should be made clear at the outset that the purpose of this presentation is to stimulate thought and discussions on the part of the appropriate parties. This chapter contains no specific recommendations on either issue. Further, the issues addressed are such that it would serve no useful purpose for the Regents to make recommendations or take positions, except the position that the issues should be addressed.

## 1. Public Colleges—Tuition Policy or No

Periodically, and particularly in New York State in recent years, there is intense debate over tuition policies and rates at public colleges and universities. Should there be no tuition, often referred to by the misnomer "free tuition?" The actual issue, of course, is *who* should pay, the State (taxpayer) or the student. Should tuition rates vary with students' ability to pay? This would make a tuition policy take on some aspects of a taxation policy. Should tuition rates at public institutions be kept low to assure access? If so, how low? A reasonable response to this question seems to be conditioned on the availability of student aid. If little or no student aid is available, tuition rates at public colleges would be the only means to achieve access.

The existence of significant student aid programs in New York provides an alternative. Carried to its extreme, and aided by the allure of simplicity, this logic would dictate that tuition should cover all costs and student aid programs should carry the whole burden of assuring access. This might be possible in an ideal world, but not in the one we live in. No one is prepared or able to assure that the decision-making process would work perfectly so that student aid programs would be adjusted quickly and appropriately as costs and tuition increase. Periodic State and Federal fiscal crises, as well as the ebb and flow of competing demands for tax dollars, militate against that ever happening.

As if these questions did not present enough imponderables, there is still another, particularly relevant, question in New York. What is the proper relationship between tuition rates in the public and independent sectors to best assure choice as well as access without jeopardizing the maintenance of strong and autonomous sectors? This question is not solely one of tuition rates; it really is about

the combined effects of tuition rates and student aid policies.

Currently, in New York State, there is no overall policy in either public system to guide the establishment of tuition rates. There may be short-term "policies" dictated by various factors. These result in periods of sporadic and large increases (at least on a percentage basis) and periods of no increase. Even these cannot be anticipated, only recognized after they have occurred.

The following excerpts are from State University's response to this issue in its 1988 Master Plan (SUNY, p. 76). City University did not address this issue, but it is reasonably certain the University would subscribe to SUNY's position.

> Low tuition goes further toward guaranteeing educational opportunity for all income levels than any of the various student aid programs, which simply cannot provide enough assistance to counter escalating costs for a full range of students. While the University supports financial aid as a way to assist students in meeting their educational expenses, student aid must always be viewed as a supplement to and not a substitute for low tuition.
>
> Public tuition is influenced by many issues, including social priorities, political principles, and available resources. The issue of public accessibility to the educational opportunities offered through the University must remain the paramount factor which guides the establishment of tuition rates.

It is not clear whether SUNY's statements are intended as reasons why there should not be an enunciated policy. Nevertheless, we do not view these statements and a tuition policy as mutually exclusive. Further, we endorse SUNY's position as *one* of the principles of a tuition policy for a public system. Another principle of, and very important reason for, a tuition policy is "predictability" – for students, parents, the State, and the universities. A recent report of the Massachusetts Board of Regents of Higher Education [1] states the matter succinctly and forcefully:

> *Tuition and Predictability*
>
> A tuition policy should incorporate the principle of predictability. It does not serve the public interest when tuition decisions are subject to the ad-hoc political, fiscal, and other pressures that too often surround them. It is a further fact that these costs must be paid. Policy decisions designed to keep tuition as low as possible must ultimately give way in light of finite public resources. The resulting pattern of "stop and go" tuition increases does not provide a rational method by which resources needs can be met, or a reasonable information base upon which students and their families may plan to meet those increasing charges.

This report contains other principles for a tuition policy for public colleges which have general applicability for New York. We acknowledge a heavy reliance on that report; in many cases we have paraphrased it.

Separate from the issues of access and choice is the role tuition and fee revenue plays in providing the resources needed by public institutions to maintain or improve academic quality. This role obviously is far less important than at non-public colleges, but it is not insignificant. If tuition revenue becomes insignificant, public colleges become totally dependent on governmental funding, with all its inherent and unpredictable fluctuations. At best this makes long-term, and perhaps even short-term, planning impossible. At worst, it "caps" the aspirations of public colleges and universities to academic excellence.

The questions raised here are not particularly new, nor do they have simple answers. Further, public debate over any one of them would not be particularly productive and could be nothing less than disruptive. Why, therefore, are they being raised at this time? In its simplest terms, the answer is that we believe an objective and comprehensive evaluation of the present condition of New York State's higher education system, in terms of access and choice and the health of its sectors, would indicate that the system is working reasonably well. If there is no serious problem, there is no need for radical change. This suggests that the present is an appropriate time for the trustees of each public system to consider developing a tuition policy in consultation with the Governor and the Legislature and other concerned parties, rather than under the pressures of a crisis situation. This year's fiscal difficulties and mandatory reductions should remind the public universities how quickly crises develop and how difficult it is to respond. While not a cure-all, a tuition policy could provide a stabilizing element in overall funding.

## 2. Institutional Student Aid in the Independent Colleges, 1979-80 to 1991-92

In 1985-86, independent colleges and universities in New York State awarded $254 million of their own unrestricted funds in student aid grants. This amount was about equal to the combined total of State TAP and Federal Pell grants going to students in the independent sector. Institutional student aid can be derived from either restricted

[1] "A Margin for Excellence: A Tuition Policy for Public Higher Education in Massachusetts" (May 1988).

or unrestricted funds.[2] Aid from restricted revenue at the independent colleges increased only 16 percent, from about $107 million to $124 million, between 1979-80 and 1985-86. During the same period, aid from unrestricted funds increased 147 percent, from $103 million to $254 million. (Given the budgetary systems used for the public systems, the amounts of institutional student aid from unrestricted funds at those colleges and universities are negligible.)

For these reasons, and others that will become clear, this paper explores only the growth of student aid from unrestricted funds at independent colleges and universities and the various implications of this growth for governmental student aid policies, tuition rates, and institutional finances.

Actual data used in this section are from the Department's Higher Education Data System. In that system, institutions report total expenditures for student aid in a category entitled "Scholarships and Fellowships," divided between amounts spent from unrestricted and from restricted revenue. For the purposes of this chapter and for ease of reference, the term "institutional student aid" will be used only for aid from *unrestricted* revenue. Projected data were collected from colleges as a part of the questionnaire for this Plan.

It cannot be stressed too much that the data presented here are for the independent sector as a whole and thus represent overall averages. Variations among individual colleges are considerable.

*Background*

Institutional student aid consists of grants awarded by a college for many purposes. A large portion is awarded solely on financial need. Other purposes are more specific, such as athletic scholarships or scholarships to attract academically talented graduate and undergraduate students. In some cases there is more than one purpose, for example, athletics combined with a student's financial need. No data are available, however, about the amount of aid awarded by purpose or about its distribution by income categories of recipients.

Independent institutions maintain that they have been compelled to increase institutional student aid because the growth in governmental, particularly Federal, student aid programs has not kept pace with increasing costs of attendance. Colleges pay institutional student aid primarily from tuition revenue. They cite this as one of the main reasons for the recent increases in tuition and fee rates.

*Trends in Institutional Student Aid from Unrestricted Funds*

Because institutional student aid is funded principally from tuition and fee revenue, it often is expressed as a percentage of tuition and fee revenue to gauge the relative significance of the absolute amounts. Data indicate that 1981-82 was the beginning year in a period of annual increases at double-digit rates of both institutional student aid and tuition. Table 34 shows, at two-year intervals, the growth in institutional student aid and the increasing portion of total tuition and fee revenue that it represents.

**Table 34**
**INSTITUTIONAL STUDENT AID AND TUITION AND FEE REVENUE**
**($ in millions)**

| Actual | (1) Institutional Student Aid | (2) T&F Revenue | (3) Col. (1) as Percent of (2) |
|---|---|---|---|
| 1979-80 | $103 | $1,238 | 8.3% |
| 1981-82 | 144 | 1,621 | 8.9 |
| 1983-84 | 197 | 1,997 | 9.9 |
| 1985-86 | 254 | 2,336 | 10.9 |
| Projected | | | |
| 1987-88 | 328 | 2,661 | 12.3 |
| 1989-90 | 392 | 3,020 | 13.0 |
| 1991-92 | 456 | 3,427 | 13.3 |

Source: NYSED, Bureau of Finance and Facilities Studies, 1988.

Between 1979-80 and 1985-86, institutional student aid increased 147 percent while tuition and fee revenue increased 89 percent. During that same period the average undergraduate tuition and fee rate increased 83 percent. Between 1985-86 and 1991-92, the independent colleges project, institutional student aid will increase 80 percent while tuition and fee revenue will increase about 47 percent. Over the entire 1979-80 – 1991-92 period (actual and projected data) institutional aid will have increased about 1.9 times faster than tuition and fee revenue.

It can be seen from Table 34 that, from 1981-82 to 1985-86, unrestricted aid as a percentage of tuition and fee revenue increased one percent every two years. The projection for 1987-88 represents a 1.4 percent increase. Subsequently, the colleges project, although the percentage will continue to increase, it will be at a slower rate.

To show the significance of this aid in another way, Table

[2] Unrestricted revenue of a college, primarily tuition and fee revenue, can be spent for whatever legitimate purposes the college wishes. In contrast, the use of restricted revenue is specified by a donor or external agency, for example a gift or bequest to be used only to build a gymnasium or for student aid for needy children of graduates of the college.

35 shows both tuition and fee revenue and institutional student aid per full-time equivalent (FTE) student. The latter is shown per FTE only because it is the FTE student that is the basic revenue (tuition and fees) generating unit. Obviously each FTE student does not receive institutional student aid.

**Table 35**
**TUITION AND FEE REVENUE AND INSTITUTIONAL STUDENT AID PER FULL-TIME EQUIVALENT STUDENT**

| Actual | T&F Rev. | Year to Year % Change | Institutional Student Aid | Year to Year % Change |
|---|---|---|---|---|
| 1979-80 | $ 4,024 | – | $ 336 | – |
| 1981-82 | 5,027 | 25% | 446 | 33% |
| 1983-84 | 6,227 | 24 | 615 | 38 |
| 1985-86 | 7,314 | 18 | 796 | 29 |
| Projected | | | | |
| 1987-88 | 8,483 | 16 | 1,047 | 32 |
| 1989-90 | 9,649 | 14 | 1,251 | 20 |
| 1991-92 | 10,743 | 11 | 1,429 | 22 |

Source: NYSED, Bureau of Finance and Facilities Studies, 1988.

It should be pointed out that, although the amounts shown for tuition and fee revenue per FTE are not the same as undergraduate tuition and fee rates, the percentage *change* from year to year for the two differs by no more than one percent.

*Implications for Institutional Finances*

The primary effect on colleges which award larger amounts of institutional student aid is similar to the effects of marginal income tax rates. Less and less of each additional dollar of tuition and fee revenue is available for the general operating purposes of the college. To illustrate this point, Table 36 shows the *additional* amounts of tuition and fee revenue collected and the *additional* amounts of unrestricted aid awarded. The third column shows how much of each additional dollar of tuition and fees collected is available to the independent colleges after funding institutional student aid. That column shows that, in 1981-82, 11 cents of each additional tuition dollar went for institutional student aid and 89 cents was available for other institutional costs. For 1987-88, the colleges estimate that 23 cents was used for institutional student aid and only 77 cents was available for other purposes. They project that this will reverse in the next few years; the data collected do not reveal the reason for this reversal.

**Table 36**
**TUITION AND FEE REVENUES AND ADDITIONAL UNRESTRICTED SCHOLARSHIPS AND FELLOWSHIPS**
**($ in millions)**

| Actual | Additional T&F Revenue | Additional Unrest. S&F | Portion of Each Additional T&F dollar available for other Purposes |
|---|---|---|---|
| 1979-80 | – | – | |
| 1981-82 | $382.6 | $40.4 | $.89 |
| 1983-84 | 376.1 | 53.5 | .86 |
| 1985-86 | 339.1 | 56.9 | .83 |
| Projected | | | |
| 1987-88 | 325 | 74 | .77 |
| 1989-90 | 359 | 63 | .82 |
| 1991-92 | 407 | 64 | .84 |

Source: NYSED, Bureau of Finance and Facilities Studies, 1988.

*Implications for Tuition Rates*

Table 37 (page 56) compares the amounts of unrestricted student aid per FTE student, and changes in those amounts, to the average weighted full-time undergraduate tuition and fee rates over the years. The data show not only that institutional student aid is a significant factor in tuition increases, but also that its impact has increased. Institutional student aid accounted for up to 15 percent of the $3,056 increase in the undergraduate tuition rate from 1979 to 1985.

In order to provide a rough estimate of the actual effect, we will assume that little institutional student aid goes to part-time students and that the aid is awarded to approximately half of the full-time undergraduate and graduate students. In 1985-86, half of all full-time students equaled about 43 percent of the total FTE enrollment (319,400 FTE). To the remaining 57 percent of the enrollees [3] this would mean, on average, that over $1,400 of the annual tuition and fees each paid went for institutional aid. For the full-time undergraduate, this represented about 21 percent of the tuition and fees paid – a significant amount, indeed.

[3] The half of the full-time students not receiving aid and all part-time students.

**Table 37**
**AVERAGE UNDERGRADUATE TUITION AND FEE RATES AND UNRESTRICTED SCHOLARSHIPS AND FELLOWSHIPS PER FTE**

| Actual | Average U/G T&F Rate $ | $ Change | Unrestricted S&F Per FTE $ | $ Change | Col. 4 div. by Col.2 |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 1979-80 | $ 3,688 | – | $ 336 | – | |
| 1981-82 | 4,573 | $ 884 | 446 | $110 | 12% |
| 1983-84 | 5,668 | 1,095 | 615 | 169 | 15 |
| 1985-86 | 6,744 | 1,076 | 796 | 181 | 17 |
| Projected | | | | | |
| 1987-88 | 8,028* | 1,284 | 1,047 | 251 | 20 |
| 1989-90 | 9,100 | 1,072 | 1,251 | 204 | 19 |
| 1991-92 | 10,200 | 1,100 | 1,429 | 178 | 16 |

* Actual

Source: NYSED, Bureau of Finance and Facilities Studies, 1988.

*Implications for Student Aid Policy*

To explore these implications, it first is necessary to determine the overall significance of institutional student aid, particularly in relation to the other major grant programs, Pell (Federal) and TAP (State). Table 38 shows the average undergraduate TAP award, the average Pell grant (both per recipient), and the average institutional student aid per full-time student. The latter (per full-time student) is derived by dividing total unrestricted student aid by all full-time undergraduate, graduate, and first-professional degree students. Obviously, every full-time student does not receive unrestricted aid. Data from the NYSED Supplement 4.1 HEDS form produce the average award per undergraduate full-time recipient shown in the last column of Table 38.

**Table 38**
**AVERAGE AWARDS FROM TAP, PELL, AND INSTITUTIONAL STUDENT AID**

| Actual | Avg. U/G TAP award | Avg. Pell Grant | Institutional Student Aid Full-Time Student | Institutional Student Aid U/G Recip. |
|---|---|---|---|---|
| 1979-80 | $1,206 | NA | $403 | NA |
| 1981-82 | 1,302 | $1,012 | 532 | $1,300 |
| 1983-84 | 1,458 | 1,189 | 730 | 1,600 |
| 1985-86 | 1,861 | 1,403 | 938 | 2,000 |

Source: NYSED, Bureau of Finance and Facilities Studies, 1988.

Table 38 shows that the amount of undergraduate aid per recipient in 1981-82 exceeded the average Pell grant and was roughly equal to the average TAP award. By 1985-86, institutional aid per recipient exceeded both. In fact, it represented over 60 percent of the total of TAP and Pell.

Table 38 shows only the relative size of the average award for each type of aid. The recipients of each type are not necessarily the recipients of all categories. Currently, no data are available to distinguish how many students receive how much aid from each source.

The Department has not collected data on the distribution of institutional aid by income categories of recipients. The questionnaire for the 1988 Plan asked colleges to estimate current and projected amounts of aid awarded by wide bands of income: Up to $25,000, $25,000 to $50,000, and Over $50,000. Currently about half the dollars go to students with incomes up to $25,000, one-third to those with incomes in the $25,000-$50,000 range, and one-sixth to those with incomes over $50,000. For 1991-92, the independent colleges project what appears to be a significant change in the distribution, with less than 42 percent of the funds going to the under-$25,000 category (down from 50 percent). Most of the increase will go to the $25,000-$50,000 group. In actual dollars, the projected shift means a small increase for students with incomes below $25,000 and a 50 percent increase for each of the other income groups. Unfortunately the questionnaire did not solicit reasons for the expected shift. There seems to be little doubt, however, that one of the reasons is the expectation that governmental student aid programs will not adjust income eligibility requirements to compensate for normal increases in family incomes ("bracket creep").

To support further examination of this issue in the 1990 Progress Report, institutions will be asked to report more detailed information on the distribution of institutional aid, by finer income categories.

*Summary*

Clearly, institutional student aid has become a significant factor in impelling tuition rates and in the student aid equation. It also is clear that there are implications almost certainly unintended and unanticipated by the colleges. Some of these are:

1. What once was a linear relationship between tuition rates and governmental student aid has become almost circular. Before institutional student aid became such a significant factor, colleges would set tuition rates on the basis of their needs for resources to meet faculty compensation increases, improve the library, add new programs, and so forth. Governmental policy makers would react to these increases by instituting or adjusting student aid programs as they saw fit and as resources allowed. Now, the independent colleges have closed the loop by introducing a student aid factor (institutional aid) into their tuition rates in reaction to governmental student aid programs. Tuition rates increase, requiring more institutional aid and/or governmental aid, and so on *ad infinitum*.

2. It has always been difficult for New York State to coordinate its sizeable student aid programs with those of the Federal government to produce a coherent and rational policy. The required data and analytical resources alone are enormous. Any attempt to coordinate *three* sources of aid, particularly when one is determined not by one but many institutional "policies," has to be ruled out. Conversely, for the State to ignore the existence and impact of this sizable source of student aid means that policy makers never really know the results of governmental aid programs. Are the institutional funds working with, or counter to, governmental policy objectives?

3. Although the taxation characteristics of institutional aid's redistribution of wealth may have existed when institutional aid was small, the current magnitude of that aid puts a different perspective on those characteristics – charging some students more so that some pay less. In 1985-86, independent colleges redistributed a quarter of a billion dollars through institutional student aid.

4. The spiraling effect of the interaction of institutional student aid and tuition rates seems inevitable. To present a hypothetical example, we will take a college of 100 students, with the institution determining that one-half need institutional aid and one-half do not. A further assumption is that a tuition rate of $9,500, if paid by all students, would cover institutional expenses *before* student aid considerations. However, the college determines that the half of the students who need aid (cannot afford $9,500) require, on average, $500 each. Raise the tuition to $10,000 and sufficient additional funds have been collected from the half who can pay, except that, at a tuition of $10,000, more "need" is created for the half who could not afford the $9,500. Equilibrium seems achievable only when the number of students able to pay exceeds the number who need aid. Yet, tuition rates which increase faster than incomes and the increasing enrollment of minorities are two factors which may limit the number of students who are able to pay.

*Conclusion*

A comprehensive review of institutional student aid seems in order. Further, it appears that such a review should be undertaken by the independent institutions themselves, perhaps by a representative group of officials with appropriate expertise. The issues this topic raises are as important as they are complicated. It would be extremely helpful to the Regents and other officials of State government if one or more papers exploring these issues could be prepared by such a group and submitted for consideration for the 1990 Progress Report.

# V
# STATUS OF REGENTS ACTIONS AND RECOMMENDATIONS PROPOSED IN THE 1984 PLAN

| | Recommendations | Actions | Total |
|---|---|---|---|
| ACHIEVED | 7 | 10 | 17 |
| PARTIALLY ACHIEVED | 3 | 8 | 11 |
| STILL PENDING | 3 | 4 | 7 |
| DISCONTINUED | 5 | 1 | 6 |
| | 18 | 23 | 41 |

## ACHIEVED

The following recommendations and actions of the 1984 Plan have been achieved and therefore are discontinued.

### RECOMMENDATIONS

**The Regents recommend that the Governor join with them and the Legislature to establish and fund a statewide professional entry program for the purpose of increasing the proportion of underrepresented minorities in educational programs leading to professional licensure.**

Chapter 31 of the Laws of 1985 created new student aid programs to attract minorities to careers in the professions. Chapter 285 of the Laws of 1986 created the Collegiate Science and Technology Entry Program (CSTEP) to provide grants to degree-granting institutions to provide supportive services within programs to improve minority student participation in undergraduate and graduate programs preparing students for licensure in the professions or for careers in scientific, technical, health, and health-related fields.

**The Regents recommend that the Governor propose to the Legislature that formal mechanisms be established, both at the regional and State levels, to assure that local education agencies, public libraries, professional groups, institutions of higher education, and the Education Department collaborate on activities designed to increase significantly, on both a short-term and a long-term basis, the proportion of minorities in the licensed professions.**

Chapter 31 of the Laws of 1985 created the Science and Technology Entry Program (STEP), which provides grants to postsecondary institutions or consortia of institutions for the purpose of assisting minority and economically disadvantaged secondary school students (grades 7-12) to acquire the skills needed to undertake collegiate study in scientific, technical, and health-related fields. In addition, as noted above, it created new student aid programs to attract minorities to careers in the professions, and Chapter 285 of the Laws of 1986 created the Collegiate Science and Technology Entry Program (CSTEP). Combined available appropriations for CSTEP and STEP increased from $1.9 million in 1986-87 to $10.7 million in 1988-89.

**In 1980, the Regents encouraged the Congress to enact the Urban Grant University program to assist urban universities to meet urban needs, as part of the Federal Higher Education Act; the Regents recommend that the Governor join them in working for reauthorization and funding of that program.**

In reauthorizing the Higher Education Act, the Congress has renewed the authorization for the urban grant university program, within a title devoted to Partnerships for Economic Development and Urban Community Service.

**The Regents recommend that the Governor propose to the Legislature the establishment of aid programs to attract additional numbers of students to prepare for careers as teachers of foreign languages, of special education, and of occupational education specialties in the schools, areas of current or developing teacher shortage. Such programs might be similar to the recently established Empire State scholarships and fellowships for teachers of mathematics and science.**

Chapter 53 of the Laws of 1984 created the Empire State Scholarships and Graduate Fellowships for Teachers (renamed the Empire State Challenger Scholarships and Graduate Fellowships for Teachers in 1986). As broadened and expanded in 1985 and 1986, this program provides 312 undergraduate scholarships and 650 graduate fellowships annually to help eliminate the shortage of teachers in mathematics, science, and other fields designated as shortage fields by the Commissioner of Education.

**The Regents recommend that the Governor seek from the Legislature increased support for the cooperative efforts linking academic and research libraries with one another and with special libraries, public libraries, and school libraries in networks that provide a wide range of access to resources.**

Chapter 36 of the Laws of 1986 increased State funding to the nine Reference and Research Library Resources systems and to public library systems for automation programs to support bibliographic control and interlibrary sharing. The aid is granted upon approval of a plan to coordinate and integrate the circulation systems of the various kinds of libraries that constitute the membership of Reference and Research Library Resources systems, including university and college libraries, public library systems, and hospital and other specialized libraries.

**In view of the relationship between funding and enrollments, the Regents recommend that the Governor work with State University to "pursue new, improved, and more flexible funding formulas for public higher education," which State University says it will pursue in Recommendation #22 of its 1984 Master Plan.**

**The Regents recommend that the Governor continue his efforts to make available to the public sectors greater administrative flexibility in the management of their resources.**

Chapters 552, 553, and 554 of the Laws of 1985 gave the State University of New York and The City University of New York additional flexibility in the management of their resources. Among other provisions, the statute gave the trustees of the public university systems the authority within prescribed limits to transfer funds from one unit to another and between programs and purposes. Also, at the State University a number of other actions have been approved, such as separate budgeting, off the State budget, for residence hall operations and hospital programs.

## ACTIONS

**The Regents and the Department will collect annually from institutions information on minority enrollment and completion of degree programs, and on actions taken to increase access to high demand programs.**

Annually, the Department collects from every degree-granting institution either the racial/ethnic distribution of enrollments (in even-numbered years) or the racial/ethnic distribution of degrees conferred (in odd-numbered years). Information on actions taken to increase access was collected in preparation of this Statewide Plan.

**The Regents and the Department call on the sectors to join with the Department in a study of the desirability of requiring the master's degree as the entry-level credential for teaching.**

During 1985, participants at the Regents/Commissioner's Regional Conferences, including persons from all higher education sectors, considered this question, among others related to the status of teaching and teachers in the public schools. This review concluded that a master's degree functionally related to the area of certification should continue to be one of the requirements for a permanent teaching certificate, but should not be an entry-level requirement.

**Review, in cooperation with the sectors, the future directions of the State's opportunity programs and prepare, by mid-1986, recommendations to the Governor and the Legislature.**

The Statewide Committee on Educational Opportunity made recommendations on future directions of the opportunity programs in the spring of 1988.

**Consider educational need and the adequacy of available resources in reviewing proposed graduate programs.**

Since November 1, 1984, the Department has registered 564 new programs leading to master's degrees and advanced certificates, and 51 leading to doctoral degrees. The Department's review of these programs has, in each case, included the new program's justification in terms of educational need and the library, faculty, and other resources available to support it.

**Survey the needs for teaching and research equipment,**

**especially computer-assisted equipment, of a representative sample of postsecondary institutions. The results of the survey will be reported to the Governor and the Legislature with an indication of the fiscal implications of the findings and suggestions for action.**

The Department's report, "High Priority Equipment Needs for Instruction at Postsecondary Institutions in New York State," was issued in July 1987. A bill to establish a program to provide grants for partial support of instructional equipment acquisition was included in the Regents 1988 legislative program. The bill was not enacted. While this action has been discontinued, it has been replaced by recommendation 34 in this Statewide Plan, which calls for the enactment of legislation to help institutions upgrade facilities and equipment.

**Work with the State Commerce and Labor Departments and the State Occupational Information Coordinating Committee to provide postsecondary institutions annually information on high demand occupational areas requiring college degrees and statistics on degrees awarded in related disciplinary areas.**

The Department has developed a computer-generated report that provides enrollment trend information by specific high-demand discipline. This information will be used in analyzing whether student demand is being met in high-demand disciplines.

**In consultation with medical school deans, the Department of Health, and other appropriate bodies, undertake a study to identify those areas in which closer articulation between undergraduate and graduate medical education is desirable and to suggest actions to bring it about.**

The Chancellor was a member of the Governor's Commission on Graduate Medical Education, which included representatives from a wide range of institutions, organizations, and agencies responsible for health care in the State. In June 1986, the Commission issued its report, recommending measures to improve the quality of physicians' postgraduate training, to increase access to quality health care, and to improve the training of physicians in order to meet rapid changes in the delivery of medical care.

**Continue to support and provide assistance to economic development projects of the New York State Science and Technology Foundation, including the State-supported Centers for Advanced Technology, and promote statewide cooperative projects of the Centers.**

The Department has provided liaison staff to the New York State Science and Technology Foundation in order to assist in such projects as the evaluation of proposals for Centers of Advanced Technology (CATs). In April 1986, the Regents approved a master plan amendment for Syracuse University, for a Ph.D. program in computer engineering; the University advised the Department that the program would support its Center for Advanced Technology in Computer Applications and Software Engineering by helping to attract highly qualified graduate students and faculty. The Department has also been active in supporting the development of cooperative projects among research universities, such as the New York State Education and Research Network (NYSERNet).

**Review proposed master plan amendments against criteria of maintaining diversity.**

Since November 1, 1984, the Regents have approved 144 master plan amendments for new academic programs and branch campus operations for 74 public, independent, and proprietary institutions. Master plan amendments are reviewed within the context of the availability of existing programs in the region and the State as a whole. The availability of programs by type of institution, public and nonpublic, and by tuition level is analyzed. Enrollment trends by academic field are reviewed to determine the extent of student demand, and postsecondary institutions are canvassed to determine anticipated competitive effect.

**Work closely with the central organizations of the four sectors in developing and refining enrollment projections with consideration for differences in both the enrollment approach for each organization and the utilization of results.**

Over the last four years, the Department has worked closely with representatives of the four sectors in developing enrollment projections, as noted in Chapter I, above. Each sector is represented on advisory committees that work with Department staff on development of the enrollment projection model. This is an ongoing activity.

# PARTIALLY ACHIEVED, CONTINUED

There has been progress made on achieving the following items. Further progress is needed, and these recommendations and actions therefore are continued.

## RECOMMENDATIONS

**Maintenance of adequate resources for graduate education and research is essential to excellence in those areas; therefore, the Regents strongly urge the Governor to seek from the Legislature adequate support for the graduate education and research activities of New York's institutions, not solely in the natural sciences and the professions, but in the humanities and social sciences as well.**

The Legislature increased State aid to independent institutions under the Bundy program in 1985-86, including a $50 increase per master's (from $900 to $950) and doctoral degree awarded (from $4,500 to $4,550). Chapter 684 of the Laws of 1986 authorized the Urban Development Corporation to issue bonds worth $68 million to further fund three technology-related facilities: the Center for Science and Technology at Syracuse University; the Center for Computers, Microelectronics and Telecommunications at Columbia University; and the National Center for Supercomputing at Cornell University. In the 1988-89 budget a total of $5.0 million is recommended for lease payments to the Urban Development Corporation for these facilities and RPI's Center for Industrial Innovation. The 1988-89 budget also includes appropriations to the Science and Technology Foundation for the nine designated Centers for Advanced Technology (CATs), $9.0 million; a new center in automation and robotics, $1.0 million; the Supercomputer Center at Cornell University, $.8 million; the Research and Development Grants program to universities and colleges, $1.0 million; the New York City Technical College Academy for Science and Mathematics, $.6 million; and the National Center for Earthquake Engineering Research at SUNY Buffalo, $2.5 million.

State support for research in the humanities and social sciences is less visible and apparently smaller than its support for scientific and technological research. In 1984, however, the Legislature established the New York State Writers' Institute at SUNY Albany; in 1986, it established the African-American Institute of the State University.

**The Regents recommend that the Governor propose to the Legislature adequate funding for the Department's ongoing doctoral program evaluations and for extension of the methods used in such evaluations to selected disciplines at the master's degree level.**

State funding for the Department's ongoing doctoral program evaluations was increased by 40 percent between 1984-85 and 1985-86. The 1986-87 State budget continued funding for these evaluations at approximately the 1985-86 level.

## ACTIONS

**The Regents and the Department will collaborate with other State agencies to develop training projects designed to increase the skill levels of minority staff currently employed as nonprofessionals and paraprofessionals who, with additional education and training, could qualify for professional licensure.**

The Department, the Governor's Office of Employee Relations, and the Office of Mental Retardation and Developmental Disabilities have established the COPREP project to provide educational opportunities that lead to professional careers for minorities in State service who are nonprofessionals or paraprofessionals.

**The Regents and the Department will encourage colleges, universities, and Teacher Resource and Computer Training Centers to provide in-service activities to foster education for a global perspective, education for civic values, integrating the arts into the curriculum, application of emerging technologies to instruction, development of group dynamic skills, and other areas of special concern that are identified by school districts.**

In 1986-87, the 74 State-funded Teacher Resource and Computer Training Centers included in their planned activities hundreds of in-service activities for public school (and some nonpublic school) teachers. The application of emerging technologies to instruction, as a primary statutory responsibility of the Teacher Centers, was prominent in this programming. Other in-service priorities were identified by the Teacher Centers themselves by polling teachers' perceptions of their needs. In their 1986-87 applications for funding, 15 percent of a sample of 45 Teacher Centers indicated specific plans to provide in-service training to foster global awareness; and smaller proportions planned in-service programs on education for civic values, integrating the arts into the curriculum, and development of group dynamic skills. The Department will continue to encourage development of these activities by the Teacher Centers, currently 99 in number.

**The Regents and the Department will encourage Teacher Resource and Computer Training Centers to initiate pilot projects to improve articulation between second-**

**ary and postsecondary education. Such projects would bring together college faculty who are interested or involved in remedial/developmental education with secondary school faculty and administrators. Pilot activities might include the development of secondary school modules on study skills and time management, and review of modes and techniques of instruction. Successful pilot projects would serve as models for dissemination through the other Teacher Resource and Computer Training Centers.**

Through contacts by Department staff and distribution of materials, Teacher Center directors have been encouraged to develop such projects. The work programs submitted in outline as part of Teacher Center applications show that a number of Centers have planned, or planned to continue, in-service courses (often provided by postsecondary institutions) in methods and approaches to remedial education. The Department will continue to call this possibility to the attention of the Teacher Center directors and policy boards.

**[The Regents call on colleges and universities] To join with the Regents in urging the Congress to expand and reauthorize the International and Foreign Language Studies programs in Title VI of the Higher Education Act, and to increase funding for international exchanges through such programs as the Fulbright and Fulbright-Hayes Programs, International Visitors Program, and the Eisenhower and Humphrey Fellowships.**

In reauthorizing the Higher Education Act, the Congress has renewed the authorizations for international and foreign language studies programs in Title VI, although at substantially lower funding levels. The Regents will seek to assure full funding for these important programs.

Federal support for educational and cultural exchanges administered by the U.S. Information Agency, such as the Fulbright and International Visitors Programs, has dropped 40 percent in constant dollars since 1965.

**The Regents and the Department will: Issue annually a report on postsecondary education summarizing and analyzing standardized educational statistics on education costs from a newly developed and generally accepted data base. Use the analysis for the purpose of informing discussion on policies to promote the most effective use of the State's resources for postsecondary education, and making recommendations on allocation of State resources.**

**The Regents and the Department will recommend allocations of funds as indicated under the Goal of "Effective Use of Resources" to help maintain diversity.**

In January 1986, the Department issued the first of a series of annual reports, *Fiscal Indicators for Postsecondary Education in New York State 1979-80 through 1983-84*. The report presents standardized fiscal information for the four sectors of postsecondary education, providing a common basis for the discussion of financial practice and policies affecting postsecondary education in New York State. It provides an array of financial data that decision makers can employ in fashioning financial policy. Subsequent reports were issued in April 1987 and June 1988. Also in January 1986, the Department issued the report, *Net Cost of Student Attendance at Postsecondary Institutions in New York State*. It examines national and State trends in both the cost of higher education and the various types of student aid programs that are available. The report develops estimates of the "net cost" of a college education after various types of financial resources are taken into account, including family contribution, student aid, and loans. The objective is to develop more specific indicators of financial accessibility than those which are available from simple national or statewide averages.

# PARTIALLY ACHIEVED, DISCONTINUED

There has been progress made in achieving the following actions and recommendation, which have been superseded by recommendations in this Statewide Plan.

## RECOMMENDATION

**The Regents recommend that the Governor seek from the Legislature adequate funding to meet the needs of colleges and universities for teaching and research equipment.**

Bills related to this recommendation were included in the Regents legislative program in 1985, 1986, 1987, and 1988; the bills were not enacted. This recommendation is replaced by Recommendation 34 in this Statewide Plan.

## ACTIONS

**The Regents and the Department will develop State legislative proposals that address the adequacy of the State's current student grant programs to meet the needs of (a) students from low-income families, (b) graduate students, (c) part-time students, and (d) independent stu-**

**dents; and to reduce reliance by lower-income students on loans to meet college-going costs.**

Bills to accomplish this action were included in the Regents legislative program in 1985, 1986, 1987, and 1988. While the Regents specific legislative proposals were not enacted, Chapters 284 and 286 of the Laws of 1986: (a) increased TAP for undergraduates from low-income families by increasing the maximum award from $2,700 to $2,850 at degree-granting institutions and raising the net taxable income ceiling for a maximum award from $5,000 to $6,500, (b) doubled the maximum TAP award for graduate students, from $600 to $1,200, (c) addressed several defects in the APTS program for part-time undergraduates, and (d) increased TAP for independent students by raising the maximum undergraduate award at degree-granting institutions from $1,800 to $2,000, with an increase in the income ceiling for a maximum award from $1,000 to $3,000. It is not clear to what extent these improvements may have reduced reliance by low-income students on loans. Chapter 425 of the Laws of 1988 created Liberty Scholarships and improved TAP further, increasing the maximum award for independent undergraduates at degree-granting institutions to $3,650 in 1989-90 and to $4,125 in 1990-91. This action is replaced by action 5 in this Statewide Plan.

**The Regents and the Department will issue annually a report on the diversity of postsecondary education in New York State that includes information on the ranges of access to programs and types of institutions, regionally and statewide.**

The Department has developed a computer model that provides on-demand reports concerning the availability of academic programs by four-digit Higher Education General Information Survey (HEGIS) subject area. The reports provide information on the number of institutions offering programs in a subject area by region and county, regional and sector enrollment shares by academic field, and enrollment trends over several years by academic subject area.

# CONTINUED

The following recommendations and actions require continued attention.

## RECOMMENDATIONS

**In view of the continued importance in this decade of doctoral study and research in engineering, computer science, mathematics, and the physical and biological sciences, the Regents recommend that the Governor propose to the Legislature the establishment of fellowship and scholarship programs to attract additional numbers of students to full-time doctoral study in those disciplines.**

Two bills to accomplish this recommendation were included in the Regents 1986, 1987, and 1988 legislative programs. One would establish 26 Regents graduate fellowships for doctoral study in engineering, mathematics, and science at New York institutions. The other would establish a program of 50 teaching assistantships in engineering at postsecondary institutions in the State. Similar proposals will be introduced as part of the Regents 1989 legislative program.

**The Regents recommend to the Governor that a portion of the savings in State aid resulting from declining enrollments in all sectors, should they occur, be used to meet the special needs of access, the maintenance of quality, or both. This issue was first addressed in the Regents 1980 Statewide Plan, and the Regents agree with the Governor's response that such a plan should not be a guarantee of long-term protection against enrollment declines. The Regents do not expect or desire such a guarantee, but rather call for protection of the excellence and access which has been achieved in our postsecondary system.**

The recommendation calls for a comprehensive annual plan to allocate back to postsecondary education a proportion of the dollar value of a decline in State appropriations resulting from enrollment declines. Funds would be distributed in a rational fashion in accordance with the overall priorities for postsecondary education. In acting on the 1984 Statewide Plan, the Governor pointed out that this should be resolved through the budget process. The Regents agree. This recommendation was first proposed in the Regents 1980 Statewide Plan, which stated that the support and participation of all concerned with the financing of higher education would be required. To date, the recommendation has not received this necessary support.

**The Regents recommend that the Governor give consideration to implementing programs suggested by the sectors to assist them in their efforts to balance faculty supply and student demand, which also would assist in increasing the numbers of women and members of minority groups at the associate professor and professor ranks, or who achieve tenure. Among the programs proposed are the following: Summertime research grants for faculty. Creation of shared faculty positions. Support for faculty retraining in high demand fields. Support for faculty exchanges with business, industry, schools, and government agencies.**



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Both the State University and the City University have made commitments to affirmative action in filling vacancies resulting from the early retirement programs they have established. The City University reported that 12 percent of the faculty who have left due to early retirement were minority and 33 percent were female. Their replacements were 25 percent minority and 55 percent female. The State University has established an Affirmative Action Registry of some 1,300 resumes to assist colleges in filling vacancies. In 1986-87, State University published a report describing the effect of the early retirement program on meeting its affirmative action objectives. All our colleges and universities need further encouragement and assistance in this area.

## ACTIONS

**The Regents and the Department urge the State University Trustees and the City University Trustees each to elaborate on its tuition policy by adopting a detailed statement of policy to guide the setting of tuition levels that includes criteria to guide the determination of those levels.**

Since approval of this action by the Governor in 1986, neither the State University Trustees nor the City University Trustees has adjusted their tuitions, and neither has adopted a statement of policy on tuition. We recognize that it is essential that the Governor and the Legislature and other concerned parties be consulted by the Trustees prior to adopting a tuition policy statement.

**The Regents and the Department will work with the sectors and appropriate individuals and professional organizations in remedial/developmental education to develop, by 1988, standards for reporting student progress and a broad agreement on appropriate credentials, standards of good practice, and methods for recognizing remedial/developmental faculty effectiveness.**

A subcommittee of the Commissioner's Advisory Council on Postsecondary Education, composed of presidents of public, independent, and proprietary degree-granting institutions, has worked with Department staff on these issues.

**[The Regents call on colleges and universities] To join with the Regents and the Department in developing proposals for State programs that would increase international understanding and educational opportunities for residents of third world nations by encouraging enrollment of foreign students in colleges and universities in all sectors in New York. Such programs must assure that enrollment of foreign students will not reduce opportunities for New Yorkers.**

Bills designed to assist in making educational programs of the State University of New York available to South Africans who were not served by postsecondary institutions in their own country were introduced in both houses of the Legislature. The bills were not enacted. Other proposals for State action to encourage enrollment of foreign students in New York colleges and universities have not been advanced.

**The Regents and the Department will develop a proposal for a dissemination program to be established for the purpose of making available to institutions that plan to initiate interinstitutional computerized networks the experience and expertise of those colleges and universities which have participated in successful programs.**

Interinstitutional computer networking is still in its initial, developmental stages in New York State. A group of public and independent research universities in the State has received State support for NYSERNet, a network linking its members with one another and with the national academic "supercomputer" centers funded by the National Science Foundation; and State University has proposed a telecommunications network which eventually would link all of its campuses (SUNYNET). The Centers for Advanced Technology at Polytechnic University and Syracuse University, each of which involves a consortium of other institutions, have been working to develop consortial networks. All these networks, once they are operational, will provide a base of experience and expertise to be shared with other institutions.

# DISCONTINUED

The following recommendations and actions are discontinued.

**To enhance services to educationally disadvantaged children, the Regents recommend that the Governor propose to the Legislature the establishment of a program to provide aid to college students who perform tutoring and other educational services in schools with high attrition rates. Classroom teachers should directly supervise this program and should work with college faculty in establishing criteria for the selection of student tutors and standards for the operation of the program.**

**The Regents and the Department will develop a State legislative proposal for a new, substantial program of aid in exchange for performance of varied, specific forms of public service. Such aid would be repayable, with interest, should the recipient not meet the public service obligation.**

Since adoption of the 1984 Statewide Plan, the Legislature has enacted significant programs designed to enhance services for the disadvantaged. Consequently, the approach proposed here no longer appears to be an appropriate priority.

**The Regents recommend that the Governor propose to the Legislature the creation of Centers on Urban Issues. These centers would bring together the combined resources and talents of our postsecondary and other educational institutions, business and industry, joint apprenticeship council, and city and county governments to address and propose approaches to the educational and noneducational problems which limit full participation in society and access to postsecondary education.**

A bill to accomplish this recommendation was included in the Regents 1985 legislative program but was not enacted. This recommendation was discontinued in the 1986 Progress Report.

**The Regents . . . recommend that the Governor join them in efforts to assure (1) that reauthorization of the student aid programs established by the Federal Higher Education Act meets the needs of New Yorkers and (2) that appropriations are adequate to meet the needs of students.**

In reauthorizing the Higher Education Act, the Congress made changes to Federal student aid programs that differ from the changes recommended by the Regents. Maximum Pell grants are significantly lower than we recommended while maximum limits on guaranteed loans and direct loans have been raised. This may increase, rather than lessen, student loan burdens. Over the next several years, the Regents will work with the Congress both to improve Federal student aid programs to meet the needs of New Yorkers and to seek full funding of the programs. They have replaced this recommendation with action 6 in this Statewide Plan.

**The Regents recommend that the Governor propose to the Legislature the establishment of a program of State support for intersector and interinstitutional cooperative activities.**

A proposal by the Regents for legislation to accomplish this recommendation was not enacted. This recommendation was discontinued in the 1986 Progress Report.

**The Regents and the Department will develop a State Legislative proposal to establish distinguished chairs in education as a component of the Schweitzer chairs in the humanities, to support excellence in scholarship related to the field of education.**

Since 1984, the Governor and the Legislature have taken significant actions in the areas of teaching and economic development, both of which this recommendation addressed. Consequently, this recommendation appears to be obsolete.

# VI
# THE 1988 MASTER PLAN OF THE CITY UNIVERSITY OF NEW YORK

The City University Trustees adopted their 1988 Master Plan for The City University of New York in May 1988. It is organized along the four issue areas: Pursuing Full Participation in Society for All New Yorkers, Assisting in the Economic Resurgence of New York State, Enhancing the Quality of Life, and Making the Most Effective Use of Resources. The Master Plan is divided in two broad parts – the University's plan, presented in the first five chapters, and an assessment of the University's status in 1988 as a sixth chapter. The Master Plan does not make formal recommendations. It does set forth goals that the University has adopted for the 1988-92 period.

## The Mission of The City University

This chapter provides a brief overview of the historical development of City University. It sets forth as CUNY's mission "to provide access to excellent higher education." It concludes that "Opportunity and excellence are at the heart of The City University's mission; opening the doors to employment and to intellectual development for students are the University's key means of fulfilling its promise."

## A Profile of the Students of The City University

In this chapter, the Master Plan provides a current profile of CUNY's students. About 90 percent are New York City residents. A majority are women (two-thirds of community college students are women). At the community colleges, 70 percent of the students are minority group members, as are 60 percent of the senior colleges' students. (The Plan notes the role of Open Admission in providing opportunities for minorities, and states that almost half the minority college students in the State in 1984 were enrolled at CUNY.)

According to the Plan, half of all senior college freshmen and about one-third of the those at community colleges hope to earn an advanced degree. Less than 10 percent expect that they will have to interrupt their studies before earning a degree. At the senior colleges, almost half the students entered with college admission averages in high school of 80 or better; that was true of only one-tenth of the community college students, however. At City University, 37 percent of the students had fathers who had not graduated from high school, compared to only 17 percent of students at four-year colleges nationwide.

About one-half of community college students and 40 percent of those at senior colleges come from families with incomes below $16,000. Almost one-quarter of community college students, and over one-third of those at the senior colleges, come from families with incomes that exceed $24,000. In 1986-87, almost 63,000 students received Pell grants worth $79 million, and 70,000 received $57 million in TAP. A majority of CUNY's students hold jobs; about one-fifth work full-time. One-third of CUNY's students are 30 years of age or older; almost one-half are 25 or older. About a third are or have been married; almost one in five support children.

Changes in the student body have led to some changes in enrollments. According to the Plan, while total enrollments have been relatively stable, full-time equivalents declined from a peak of 140,000 in 1983 to 133,000 in the fall of 1987. This reflects two factors, a decline in first-time freshmen since 1983 and a growing *share* of total enrollment represented by part-time students.

This chapter concludes by presenting three projections of enrollment through 1994. All three assume no change in the percentage of high school graduates going to college and no change in CUNY's share of postsecondary enrollments. The first assumes no change in either high school or CUNY retention rates and a steady job market. It yields a slight increase in total enrollment for 1989 and then a decline to about 183,000 in 1992.

The second scenario assumes some improvement in high school and CUNY retention rates and a rise in the unemployment rate from the current 5.5 percent level to just over six percent by 1992. It yields growth in total enrollment to 190,000 by 1992.

The final scenario assumes a slight deterioration in retention rates at the high schools and at CUNY, and a drop in unemployment from 5.5 percent to 5.0 percent by 1992.



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This yields an enrollment decline of about 7,500, to 175,000 in 1992.

The Master Plan deems the second scenario to be the most plausible. Therefore, it adopts as City University's best estimate a total headcount enrollment of 190,000 in 1992, with a projected enrollment in 1994 of between 189,000 and 195,000.

[In comparison to the two percent growth in total enrollment by 1992 projected by City University, in this Statewide Plan the Regents project a one percent decline in CUNY's total headcount enrollment between 1987 and 1992, to 184,380 students.]

## The Next Four Years: The Goals and Plans of the University

Under the topic, *Pursuing Full Participation in Society for All New Yorkers*, the Plan adopts as a description of Full Participation "an equal opportunity to compete for a share of the resources society has to offer" plus "access to the ideas and experiences that constitute one's culture." It points out that a growing percent of the City's residents are not fully participating. One quarter of all New Yorkers live in poverty, as do two-fifths of the City's children. "In New York City, living in a single-parent family almost implies living in poverty"; the Plan notes that 60 percent of the City's single-parent families have incomes below the poverty level. By the year 2000, single-parent families may constitute 15 percent of the City's households.

The Plan notes City University's efforts to provide education to help the poor participate in society. This includes its work with the schools to improve student performance and its own efforts to improve retention. It sets eight objectives for the University:

1. Target high school students for special programs. In the next four years, CUNY intends to continue the programs it has begun in collaboration with the Board of Education – including Middle Colleges, the College Discovery and Development Program, and College Now – and examine additional activities, such as faculty development and curriculum development, that improve teaching and learning in the schools.

2. Strengthen teacher training programs. Over the next four years, City University will revise undergraduate degree requirements for prospective teachers to place greater emphasis on the liberal arts; restructure pedagogical training to achieve more coherence, incorporate the results of recent research, and integrate coursework and field experiences; and assess and revise standards in teacher education programs to maximize quality.

3. Improve the recruitment of underserved groups. The University will seek to use external organizations to encourage promising students to enter under the aegis of special programs. It will collaborate with the Board of Education to assist disabled high school graduates to enter college. It will intensify recruitment of minority doctoral students at the Graduate School.

4. Expand basic skills programs. On the basis of the success of its prefreshman summer basic skills programs, CUNY is developing an "intersession" basic skills program for students entering the University in the spring term. Post-freshman summer programs for students who have not passed the basic skills tests by the end of their freshman year were piloted in 1987; CUNY will seek funds to implement them throughout the system. The University also intends to refine its testing program and such other approaches as writing across the curriculum, peer tutoring, and the use of instructional technology.

5. Improve the student retention and graduation rates. Over the next four years, CUNY will seek resources to expand its tutoring services, launch pilot summer programs for limited-English-proficiency students, and offer a summer institute for students with deficiencies in mathematics and science. Committing itself to "bettering the delivery of student services that improve retention rates," CUNY will seek additional resources to support its students' financial needs. It also will improve the delivery of financial aid services. To meet the needs of students who work, CUNY will continue to offer a large number of courses outside normal working hours and recognizes the need for support services during those periods. The University's Child Development Centers will be expanded. Finally, CUNY will seek funds for the equipment and services needed to make the programs on each campus more accessible to disabled students.

6. Improve articulation between the community and senior colleges. Over the next four years, CUNY will automate the existing Course Equivalency Guide, continue annual articulation workshops, develop new sources of funding for transfer initiatives, and improve research on transfer students.

7. Support minorities and women at the graduate level. To expand the University's commitment to women and minorities at the doctoral level, the Graduate School has targeted improved financial aid opportunities and adequate student housing.

8. Vigorously implement affirmative action. To achieve the goals it sets, the University will expand the pool of talent for faculty positions through its graduate initiative and examine the opportunity for developing and advancing the talent already present on its staff.

In the area of *Assisting in the Economic Resurgence of New York State*, the Master Plan points out that New York City's labor market in the 1990's will be characterized by a continued expansion of jobs that require higher education and a continued loss of opportunities for unskilled labor (a population made up increasingly of members of minority groups) and a shrinking pool of younger workers. It notes

that, today, schools and colleges are the primary regulators of labor supply and that business, government, and education "are connected by a pattern of mutually reinforcing decisions that shape the composition, size, and quality of the labor pool."

The Plan points out that problems in the public school system constrain the ability of New York to compete fully in the labor market. City University is working to improve opportunities for the high school population. It also seeks to provide the services needed to support college attendance by students with job and family responsibilities and, often, poor preparation for college work. It sets four goals for the University:

1. Expand curricula which make use of internships and cooperative education. It notes that a number of the colleges plan to introduce or expand such programs.

2. Maintain a strong commitment to research. Citing some of the University's research centers and institutes, the Plan commits the University to nurturing research in the sciences and technology and to encouraging its colleges to establish research efforts that contribute to the City's life.

3. Expand adult education programs and collaborations with labor unions and employers. The University will continue the direction exemplified by the cooperative initiatives cited in the Plan.

4. Plan new courses that meet the needs of small business and international business. The Plan cites projects being developed by several colleges to provide these services.

Under the topic, *Enhancing the Quality of Life*, the City University Plan notes that the quality of life in New York City "varies from neighborhood to neighborhood, block to block, and person to person." Citing the current CUNY teaching, service, and research activities that support improvement of the quality of life for the people of New York City, it sets six goals for the next four years:

1. Continue to bring the capabilities of the City University research centers and institutes to bear on contemporary problems. The Plan cites examples of some of the activities that a number of the centers and institutes will undertake.

2. Improve the quality of life on campus. The University is examining the use of an Individualized Learning and Assessment Profile for every full-time undergraduate. If feasible, it will seek funds to develop a profile that would connect students' skills and performance levels, study and career goals, and academic programs.

3. Support the teaching process. The University will begin to explore more responsive and flexible learning formats; experiment with intensive courses, collaborative learning, community learning, and co-op learning; and more fully exploit the use of technology.

4. Train workers for new employment sectors. The Plan cites initiatives the colleges intend to undertake to adjust their curricula to take account of labor market changes.

5. Expand service to the community. The Plan notes some of the ways the colleges will expand their service activities.

6. Increase arts and recreation programming. The Plan reports some of the activities the colleges intend to undertake.

In the area of *Making the Most Effective Use of Resources*, the Plan reviews recent changes in the budget development process and structure. It notes that the different funding systems for the senior and community colleges present a "challenge to effective implementation of University-wide policies, programs, and administration." Under this topic, seven initiatives are described:

1. Early retirement incentives. The Plan cites the success of the early retirement program at the senior colleges in allowing the University to redirect resources. It says that the University is continuing to discuss with the City the feasibility of implementing a similar program at the community colleges. Over the next four years, the University will begin to study additional possible early retirement options.

2. Internal control. The Plan reports on efforts to implement the 1987 legislative requirement that CUNY identify the need for, and develop plans to implement, internal controls to help it monitor expenditures more effectively.

3. Computerization and management strategies. Over the next four years, the University expects to realize substantial efficiencies by computerizing operations and integrating existing operations into a more unified system. It also intends to seek further improvements in energy management; install an inventory program to allow managers to track the purchase, utilization, and disposition of equipment at the campuses; and use certificates of participation to purchase items at lower-than-normally-available interest rates.

4. Expand development. The University plans to expand and enhance the University-wide Council of Grants and Development Officers and formulate strategies to maximize private grants and contributions, particularly by direct alumni giving to the colleges.

5. Raise the level of financial aid to meet needs. The University is committed to developing institutional aid that will bridge the gap between Pell and TAP grants and students' needs.

6. Facilitate the enrollment of the underserved student. The University will maintain its effort to support part-time students and renews its commitment to recruit and retain the poor, the academically disadvantaged, full-time workers, the disabled, and persons with family responsibilities.

7. Monitor institutional quality. During the four-year period, the University plans to undertake surveys of student satisfaction, surveys of the employment and educational experiences of each graduating class beginning with the Class of 1987, transfer studies, and a longitudinal

study of the employment and educational experiences of early admission students.

## Mission Statements and Goals of the Colleges: 1988-1992

This chapter sets forth the current mission and objectives of each college during the period of the Master Plan.

## The City University of New York, 1988: Taking Stock

This chapter is a status report on The City University of New York, 1988. It covers Faculty and Research, Academic Programs, Student Affairs and Special Programs, Partnership Programs with the New York City Board of Education, The Libraries of the City University, University Systems and Computing, and Facilities.

**Regents action:** Except with respect to the projection of enrollments, the Regents approve the 1988 Master Plan of The City University of New York. In so doing, the Regents do not waive any requirements for individual master plan amendments. The Regents substitute for the enrollment projections in the City University Master Plan their enrollment projections for City University as set forth in this Statewide Plan (Tables 9-11, pages 20-22).

# VII
# A Summary of the 1988 Master Plans from the Association of Proprietary Colleges in New York State

## Mission

The Association of Proprietary Colleges describes the proprietary colleges' general mission as one of providing quality educational programs for all students regardless of race, creed, color, sex, age, religion, or ethnic origin. Their target student population, whether of traditional college age or adult, "is not interested in the more traditional liberal arts or technical programs." The majority of such colleges offer entry-level education "designed to lead students to careers in area business and industry in the shortest possible time," according to the summary. Through special programs, the proprietary colleges assist students who need to complete their high-school requirements while working on a degree program in college.

## Assuring Full Participation in Society for All New Yorkers

According to the summary, the proprietary colleges seek to extend access for minority-group members through expanded recruitment, special remedial programs, and financial aid. "Most of their clientele is local," and their largely urban locations provide them with an opportunity to work closely with minorities and the underprivileged. To increase the number of minorities and women in professional fields, proprietary colleges provide in-service programs enabling their own faculty to qualify for promotions; they offer special workshops and continuing education to professionals, including minority-group members. Proprietary colleges work with local high schools to encourage minority students to continue their education. For their own graduates who wish to go on, they see a need for improved articulation with four-year colleges. Many proprietary colleges offer instruction in English as a second language. Many are removing architectural barriers for the handicapped. There has been an increase in programs offering counseling, day care, basic employment skills, and retraining. Most colleges in the sector plan to increase these efforts.

## Assisting in the Economic Resurgence of New York State

The summary notes that proprietary colleges contribute directly to the State's economic life by training entry-level employees and responding quickly to changing skill requirements in this marketplace. The colleges' focus on business prompts them to address the needs of the State's highly international economy through such efforts as one college's student-employee exchange program with prominent retailers in London and another's student tours of international fashion markets in Paris, London, Milan, and Tokyo. Proprietary colleges seek to address the needs of workers by offering retraining programs to keep their skill levels current. They work with employers to award college credit for corporate courses and offer courses at worksites. For these contract courses, they suggest that the State should provide funding as it does for community colleges. To retain new college graduates in the State, one college suggests that business and government cooperate in providing reasonable housing or financing as an incentive. Through flexible scheduling, convenient locations, and job-related educational programs, the proprietary colleges reach out to adults in their communities. To bolster these efforts, they call for State assistance with day care, financial aid, and cooperative arrangements with senior colleges, particularly those in the public sector.

## Enhancing the Quality of Life for New York State Residents

According to the summary, proprietary colleges' efforts to enhance the quality of life begin with their students. They generally have a comparatively small enrollment and are located in the midst of the clientele they serve. Thus, college faculty and administrators have the opportunity to know their students and to learn about students' lives and problems. They can institute what the summary calls a "systems approach," in which one college treats the "family as client" and provides counseling for drug and alcohol

problems, employment and vocational services, and individual and family treatment. In addition, some of the colleges reach out to their communities with senior-citizen programs in cooperation with community agencies; and meeting space, educational programs, and entertainment for community groups. Many proprietary colleges are adding to their educational programs courses or material on ethical, moral, and civic values. To enhance the quality of instruction, a number of the proprietary colleges are broadening the range of technical, business, and service programs they offer; adding liberal-arts courses and content; initiating extracurricular offerings such as guest speakers and seminars on current topics; and developing student-evaluation measures and work-internship programs. One college augments its music-education program with free concerts, lectures, a film series, and video screenings, all open to the public. Another assists its students in arranging visits to large urban libraries, museums, theaters, and concerts. Proprietary colleges frequently have cooperative arrangements with local libraries and other facilities such as YMCA's. Providing well-educated citizens and community leaders is another way in which proprietary colleges enrich the quality of life in their communities, according to the summary.

## Making the Most Effective Use of Resources

The summary notes that proprietary colleges, which are run as businesses, must operate efficiently to be cost-effective. This means monitoring the quality of their product – the education they offer – as well as keeping cost (tuition) increases as low as possible. In this regard, they recommend (1) that the State keep pace with inflation in funding TAP and (2) that "Other state aids provided students in the independent sector . . . be made available to students attending proprietary colleges." To maintain institutional quality, proprietary colleges regularly review student performance, using tests and other measurements; monitor problems through student advisement; and monitor the success of placement efforts, as well as graduates' job performance. The colleges' plans to control costs in the coming four years include making more effective use of space, scheduling classes more efficiently, making better use of faculty talents and skills, centralizing purchasing, removing redundant or outmoded programs, and effecting savings in maintenance and utilities.

According to the summary, more than half of the proprietary colleges anticipate annual tuition increases of four to six percent over the next four years, with one college projecting a seven-to-nine-percent increase. Most of the others anticipate tuition increases matching either the inflation rate or required increases in expenditures. The summary states that proprietary colleges, concerned about the need for additional sources of revenue, are exploring revenue-producing uses of facilities and services, as well as more direct aid from the State and Federal governments.

To provide continued access, most of the proprietary colleges have student financial-aid plans. One has an annual, $1.2 million scholarship competition which, "though not exclusively need-based, is shared by economically disadvantaged students." Another has formed a foundation to raise $700,000 from corporate and private sources by 1992, to be used for student assistance. A third plans to supplement or replace government loan programs with its own student loan fund. Most proprietary colleges permit students to spread out tuition and fee payments throughout the year; some offer work-study opportunities and work opportunities in cooperating local businesses.

The summary describes a three-pronged approach to enrollment planning in the proprietary sector: recruitment of more mature students, recruitment of workers into retraining and skill-upgrading programs, and innovative educational programs in new niches such as music marketing, travel and tourism, and conference planning. Provision of housing and wider recruitment geographically are other techniques employed by some proprietary colleges.

# VIII
# THE 1988 MASTER PLAN OF THE STATE UNIVERSITY OF NEW YORK

In May 1988, the State University Trustees adopted "The Responsive University: Recommendations of the State University of New York for 1988-1992" as "The Master Plan of the State University of New York Revised and Reaffirmed, 1988." The Plan's purpose is "to identify priorities and to focus the activities of the campuses toward their achievement." It makes 20 specific recommendations.

## Public Higher Education

The first part of the Master Plan sets forth some of State University's accomplishments in the areas of Opportunity, Academic Strength, Research, and Economic Growth. It identifies five issues, described as "the core of the Plan," as among the prominent issues facing SUNY in the late 1980's and early 1990's:

- Strengthening New York State – described principally in terms of graduate education and research.
- Assuring a Better Life – described principally in terms of accessibility and excellence of undergraduate education and its importance to New York's social and economic well-being.
- Minority Recruitment and Retention – SUNY's efforts to recruit and retain students, faculty, and staff who reflect the State's racial and cultural diversity.
- Teacher Education – described in terms of addressing a teacher shortage and preparing teachers "sensitive to the racial and cultural diversity of the students they will be serving."
- Balancing Needs and Resources – described in terms of SUNY's need to "protect and use effectively" resources provided and "to strive for a balance between available resources and need to enrich and improve the lives of the people of New York State."

## The State University of New York: A System

This section notes the range and diversity of SUNY's campuses and their offerings. It discusses cooperative activities both among SUNY campuses and with CUNY and independent institutions. It cites a need to give more attention to addressing emerging needs by redirecting University resources in such efforts as off-campus opportunities or affiliations between campuses. In this section, the Plan makes the following recommendation:

#1. The University will continue to explore and implement all valid alternatives for the effective use of its resources.

**Regents action:** Approved.

## Mission Priorities

The SUNY Plan sets forth 14 mission priorities. *Opportunity to Enter the System* notes the policies and programs that underscore the University's commitment: Full Opportunity Programs at community colleges, opportunities at the Colleges of Technology, the Educational Opportunity Program, Educational Opportunity Centers, articulation agreements between two-year and four-year campuses to facilitate transfer, flexible formats to meet adult needs, and SUNY's common admission application program. It notes steps to increase recruitment and retention of minority group members, including more aggressive efforts to recruit in large urban areas, especially New York City. The funding provided for affirmative action and for scholarships and fellowships for minorities is noted, as are other efforts.

Noting anticipated demographic and economic changes, *Ensuring the Quality of the Undergraduate Program* calls on SUNY to: educate an increasing diversity of New Yorkers; ensure that its faculty and staff better reflect the State's cultural diversity; assist women to enter academic and professional fields in which they are underrepresented; reduce attrition and increase graduation rates; develop to the highest proficiency level the communication and computation skills of all SUNY students; expand its graduates' capacity to absorb information and assess issues and enhance their ability to reach reasonable and ethical

decisions; involve all students in those developmental experiences outside the classroom that stimulate personal and professional growth and civic responsibility; and ensure that all SUNY graduates are sensitive to the needs and cultures of diverse groups.

*Improving Graduate Programs and Research Activities* discusses the purpose and objectives of SUNY's Graduate Initiative. *Teacher Education* reviews SUNY's actions to strengthen teacher education. At the undergraduate level, these include campus implementation of a recommendation that all undergraduates preparing for teaching careers complete a disciplinary major or concentration. At the graduate level, they include introduction of M.A.T. or M.S.T. programs. It notes the attempts made, through the SUNY budget and grant applications, to support collaborative efforts between campuses and schools. In 1988, the University Senate endorsed the concept of "Academic Alliances," under which all school and college faculty in the same discipline within a geographic locality share responsibility for the quality of teaching and learning in that discipline. *Academic Quality* reports on the periodic review processes for undergraduate and graduate curricula. It notes grants received by Plattsburgh to develop tests to assist in analyzing how students learn and how institutions contribute to their learning, and by Fredonia to evaluate its general education program. *General Education* states that general education aims at fostering intellectual maturity and integrity in students and graduates through such campus developments as required upper-division seminars in moral values at Purchase and in contemporary issues at Brockport.

*Articulation* points out a 1980 Trustees' resolution stating "that all graduates of SUNY two-year colleges accepted into parallel programs at the University's baccalaureate campuses would be accorded full junior status, and the opportunity to complete bachelor's degree requirements within four semesters of full-time work." It reviews steps taken since then to strengthen articulation between two-year and four-year programs, including the Student Data File. It continues SUNY's commitment to access through transfer.

"Lifelong learning is of growing importance in our society," according to the *Lifelong Learning* priority. It notes that all campuses offer both credit-bearing and non-credit lifelong learning instructional activities. *International Programs* is described as a key initiative for the late 80's and beyond. SUNY is committed to strengthening international programs and those in foreign languages, area studies, geography, and international business, economics, and politics. Under this priority, the Plan reviews SUNY's faculty and student exchange activities. It notes the University's intention to increase the number of foreign students at both State-operated campuses and community colleges. *Cultural Services in the Arts* states SUNY's commitment to provide experiences in the arts for its students; as a result "its communities enjoy a remarkable range of cultural events as well." It says that SUNY will encourage greater professionalism in the delivery of cultural services and arts management, deepen its ties with the cultural community, and develop partnerships with arts organizations. *Libraries* reviews the scope of services provided by SUNY campus libraries. Under *The Quality of Student Life*, the Plan recognizes the learning that occurs outside the classroom and notes the important contribution of support services to the quality of student life.

The priority for *The Quality of Life in the Community* reviews the contributions made by SUNY campuses. Under *Affirmative Action*, the Plan reports efforts to recruit and retain minorities and women among faculty and staff and data on minority and female employees.

In this section, the SUNY Plan makes the following nine recommendations:

#2. The University will continue to develop effective means of supporting minority enrollment on its campuses, particularly in academic programs where minorities are underrepresented.

**Regents action:** Approved.

#3. The University will work to assure the continued excellence of its undergraduate educational experience.

**Regents action:** Approved.

#4. The University will continue to strengthen its capacity for graduate education and research related to economic development in New York State.

**Regents action:** Approved.

#5. The University will encourage its campuses to provide graduates of teacher education programs with preparation which combines intensive study in the academic disciplines with education for professional competence.

**Regents action:** Approved.

#6 The University will encourage creative partnerships between schools and colleges with joint efforts in areas such as curriculum, professional development, and collaborative research.

**Regents action:** Approved.

#7. The University will continue to maintain the high quality of its academic programs – undergraduate, graduate, and professional – and will monitor this effort through continuation of internal campus re-

views and the accreditation reviews conducted by the appropriate voluntary agencies and professional associations.

**Regents action:** Approved.

#8. The University will continue to identify and respond to needs for lifelong learning, making use of cooperative arrangements among campuses and with other agencies to provide quality educational offerings in the most cost-efficient manner.

**Regents action:** Approved to the extent consistent with campus academic missions. In doing so, the Regents do not waive any requirements for individual master plan amendments.

#9. The University will continue to maintain a high quality of student development programs and will increase and adapt student services and programs to fit the needs of the changing student population and of New York State.

**Regents action:** Approved.

#10. The University will continue its efforts to increase employment opportunities for women, minorities, and the handicapped.

**Regents action:** Approved.

## Academic Programs

This section of the Master Plan describes the relative levels of instructional activity, measured by full-time equivalent student workload, by discipline area for each type of campus. For all State-operated campuses, in the fall of 1986, the greatest activity in undergraduate education was in the social sciences, followed by letters, mathematics, education, fine and applied arts, and the physical sciences. At the graduate level, the greatest activity was in education. This section contains no recommendations.

## Campus Directions

This section describes program emphases at each campus of the University within its existing mission. No recommendations are included.

## Public Service

The State University Plan describes Public Service as an organized, institutional service to improve the quality of life or the economic well-being of New York's people. It reviews current SUNY public service activities and states that the University will respond to New York's economic needs by increasing externally supported scientific research and providing additional opportunities for University-industry interaction; speeding the transfer of important technology to the marketplace by licensing, assistance to emerging companies, and further development of supplemental design and prototype services; establishing Business and Industry Centers Service Offices at each of the 35 campuses designated as such Centers; expanding efforts to ensure economic growth while preserving environmental quality and resolving issues in solid and hazardous waste elimination; building a network of campus programs of regional economic analysis; expanding efforts to assist the well-being of rural areas; increasing assistance to manufacturing enterprises, new businesses, and small businesses at risk, especially those owned by or serving minorities, women, veterans, and the handicapped.

The Plan gives special attention to Health Sciences and Public Service, noting the clinical facilities operated by State University in the fields of medicine, dentistry, and optometry.

This section includes the following recommendations:

#11. The University will continue to apply its instructional, research, and technical assistance resources to public needs, in cooperation with business, industry, labor, state and local government, community agencies, and other sectors of education.

**Regents action:** Approved.

#12. The University will contribute to the vitality of the respective regional economies by seeking to maximize the utilization of campus training/retraining resources in each of the ten economic development regions of the state.

**Regents action:** Approved to the extent consistent with each campus' academic mission. In doing so, the Regents do not waive any requirements for individual master plan amendments.

## The Enrollment Plan

State University anticipates a small decline in full-time equivalent enrollments at both State-operated campuses and community colleges over the four years of the Plan, with level enrollments in the following four years. The mix of full-time and part-time students is expected to change, and the number of older students to increase. The Plan sets forth the factors underlying the projected enrollment levels, and the University's enrollment planning procedure. The projections assume no major changes in social patterns, economic conditions, or public policies affecting higher education. The following enrollment levels are recommended:

#13. The University estimates the following ranges for full-time equivalent enrollments at its State-operated campuses:

| 1988-89 | 1990-91 | 1992-93 | 1998-99 |
|---|---|---|---|
| 158,000-165,000 | 156,000-164,000 | 155,000-163,000 | 155,000-163,000 |

**Regents action:** The Regents substitute their enrollment projections for State University State-operated campuses as set forth in this Statewide Plan (Tables 9-11, pages 20-22). It should be noted that, as a result of the consultative process used in development of the enrollment projections for this Plan, there is a difference of less than one percent between State University's low projection of FTE enrollment at State-operated campuses in 1992-93 and the Regents projection for these campuses on an FTE basis.

#14. The University estimates the following ranges for full-time equivalent enrollments at its community colleges:

| 1988-89 | 1990-91 | 1992-93 | 1998-99 |
|---|---|---|---|
| 120,000-127,000 | 118,000-127,000 | 116,000-125,000 | 116,000-125,000 |

**Regents action:** The Regents substitute their enrollment projections for State University community colleges as set forth in this Statewide Plan (Tables 9-11, pages 20-22).

## Capital Facilities

This section notes that SUNY's first objective in establishing the Capital Plan is to provide the facilities needed to meet its approved academic plan. *Making the Campuses Fully Functional* discusses the development and current status of the Master Capital Plan. Currently, it assumes a $1.3 billion increase in SUNY's bonding authority, and an additional $100 million in construction under existing HFA authority. *Maintenance, Repair, and Restoration* notes a projected total academic and support facility rehabilitation and repair need of $923 million over the 1988-1992 period, and a further $83 million needed to rehabilitate and repair residential facilities. *Equipment* reviews the current status of non-residential equipment and residential equipment. It cites particularly a need to replace academic support equipment, and the need to replace obsolete scientific equipment with state-of-the art instruments. *Energy Efficiency* reviews SUNY's actions to reduce energy costs. Between fiscal 1973-74 and fiscal 1986-87, SUNY realized an annual energy-consumption reduction of about 25 percent, yielding an energy cost avoidance of over $251 million, according to the Plan. This section includes four recommendations.

#15. The University will continue its capital construction program in order to provide the facilities to conduct its programs.

**Regents action:** No action taken. This is within State University's authority.

#16. The University will continue to exercise its responsibility for the maintenance, repair, and restoration of campus facilities.

**Regents action:** No action taken. This is within State University's authority.

#17. The University will seek to provide and maintain the equipment that is vital to its academic, research, and health delivery programs.

**Regents action:** Approved.

#18. The University will continue to reduce energy consumption and increase energy efficiency at all campuses.

**Regents action:** Approved.

## Fiscal Issues

This part begins by discussing low tuition. It notes the statutory provision prohibiting the Trustees from adopting changes affecting tuition charges prior to the enactment of the annual budget, together with the State's annual budget development process, and states that these do not lend themselves to multi-year projections of tuition. *Development Programs* reviews growth in SUNY campus fundraising from $18.2 million in 1981-82 to $39 million in 1986-87 (excluding the statutory colleges), reflecting the 1982-83 budgetary decision to support external development programs.

In a discussion of *Funding Formulas*, the Plan anticipates that State University will serve more part-time and nontraditional students during the planning period while increasing its public service commitments. It points out that a student body that includes more older students, more women, more minorities, and more part-time students puts more demand on certain campus services, such as day care or outreach services. The changing mix also demands modifications to academic schedules to meet the needs of part-time students who hold jobs. Differences in prior educational preparation and in the life experiences of students will require significant enrichments of both student support services and academic programs. Under these circumstances, enrollment-driven funding formulas developed in the past primarily to support classroom instruction of full-time students do not generate resources appropriate to the new student body. Funding formulas

should recognize changes in student needs and in campus missions, and the existence of fixed costs.

In this section, two recommendations are presented:

#19. The University is committed to maintaining low tuition.

**Regents action:** Deferred. In the 1984 Statewide Plan, the Regents called on the State University Trustees to "elaborate on its tuition policy by adopting a detailed statement of policy to guide the setting of tuition levels that includes criteria to guide the determination of those levels." In acting on that recommendation, the Governor agreed that "the policies under which those tuitions are set should be incorporated in a separate statement." In the intervening four years there has been no change in tuition at State University's State-operated campuses and, to date, the Trustees have not adopted such a statement on tuition policy. The Regents have renewed their recommendation in this Statewide Plan.

#20. The University in cooperation with state government will continue to pursue improved methods for allocating the resources available to public higher education.

**Regents action:** Approved. The Regents strongly agree that there is a need to revise funding mechanisms for public institutions to better meet needs generated by adult, part-time students; they are making a similar recommendation of their own (36) in this Statewide Plan.

# IX
# A Summary of the Independent Sector Master Plan

The Independent Sector Master Plan: Transmittal to the Regents for Development of Postsecondary Education in New York State 1988 sets forth recommendations; an overview of the independent sector of higher education in New York State; mission priorities; goals; the independent sector's response to the Regents/Governor's call for higher education institutional master plans; and special sector concerns in the areas of tuition, the cost of college and government aid, minority recruitment and retention, research, graduate and professional schools, economic development, preparation of the workforce of the future, and adaptability/flexibility – the non-traditional student.

## I. Executive Summary

This is an executive summary of the Plan.

## II. Recommendations

The Master Plan makes 27 recommendations grouped in seven areas. In those Regents actions to Approve in Principle, the Regents do not commit themselves to specific details or fiscal implications of the recommendations.

1. Institutional Support. The Commission on Independent Colleges and Universities recommends that the Regents:

   a. Seek increases in the independent sector's direct institutional aid program (Bundy Aid) to restore it to its earlier levels of funding proportional to independent institutions' operating budgets. In 1979-80, Bundy Aid was equivalent to 4.7 percent of institutions' "student-related educational expenditures." In 1985-86, it represented only 3.9 percent of those expenditures. In 1988-89, it is expected to decline to less than 3.5 percent.

      **Regents action:** Approved in Principle.

   b. Encourage the conservation of scarce resources and the benefits of collaborative efforts by seeking incentive grants or low- or no-interest loans to promote consolidation, sharing of faculty, and joint teaching programs.

      **Regents action:** Further consideration. This recommendation requires further study.

   c. Develop consortial programs of public-private cooperation to improve college and university libraries, particularly research libraries.

      **Regents action:** Approved in Principle.

   d. Develop means of identifying institutions facing financial exigency and aiding them in planning corrective action, including possible consolidation or merger, to assure that essential educational services continue to be provided.

      **Regents action:** Approved.

2. Undergraduate Education. CICU urges the Regents to:

   a. Make a sustained commitment to improving TAP so that it will once again cover 60 percent of the weighted average undergraduate tuition of independent institutions, as it did in 1974. With the current enhancement, when complete, TAP will cover 43 percent of undergraduate weighted average tuition. Thereafter, efforts should be made to restore TAP to the 60 percent level. Another means of increasing TAP's efficacy would be elimination of the "uppercut," the automatic reduction in TAP awards that occurs in the fifth semester in which a student receives TAP.

      **Regents action:** Approved in Principle.

   b. Recommend a doubling of funding and the removal of constraints currently affecting the Aid for Part-Time Students Program (APTS). APTS provides access to the most rapidly growing segment of the student population, a segment that includes many non-traditional students. Current program constraints regarding institutional liability, coursework completion and minimum number of courses limit the accessibility and usefulness of the program to this population.

      **Regents action:** Deferred. The Regents favor expansion of the Aid for Part-Time Students pro-

gram but do not believe that funding should be increased until the Legislature acts favorably on the Regents recommendations to improve the program.

c. Promote the development of cooperative education programs in which students work part-time in their chosen fields simultaneously earning funds to finance their educations, learning about their prospective occupations, and providing skills to employers. Similarly, internship programs could be established to provide work-related experience in the course of students' education.

**Regents action:** Approved in Principle.

d. Develop and support programs, or strengthen existing financial aid programs, to reduce the migration of New York students to other states to attend college. Such migration leads to unused instructional capacity, already a concern in the western part of the state, and reduces the supply of college graduates available to enter New York State's workforce.

**Regents action:** Approved in Principle. Student aid is not the only element, and may not even be the most important element, in a program to reduce the number of New Yorkers deciding to attend college in other states.

3. Access for Minorities and Disadvantaged Citizens. The Regents should:

a. Initiate a planning process involving colleges and universities, high schools and the State Education Department to develop as effective a Liberty Partnership program as possible.

**Regents action:** Approved.

b. Advocate a major expansion of the Higher Education Opportunity Program (HEOP). If the Liberty program succeeds, it will bring many students, previously regarded as "high risk" of dropping out, into the colleges and universities. They will need the support services, like tutoring and counseling, that HEOP provides to ensure their continued progress. The institutions must be able to respond to their needs. Today, even before the inception of the Liberty Scholarships, some 15,000 students who are in need of HEOP's services cannot obtain them because of lack of capacity. (HEOP now enrolls 6,400 students.) HEOP should be expanded to accommodate all of these students and the Liberty participants who will join them.

**Regents action:** Approved.

4. Graduate Education and Research. The Regents should:

a. Increase access to graduate study and encourage more students to pursue such study by advocating a substantial improvement in the Graduate Tuition Assistance Program, so that Graduate TAP covers 50 percent of the weighted average graduate tuition at independent institutions.

**Regents action:** Approved in Principle.

b. Expand opportunity for graduate study to new populations by proposing programs of aid for part-time graduate students similar to programs for undergraduates. As at the undergraduate level, part-time students are a rapidly increasing segment of the graduate student population. It is important that these students receive the aid they need to pursue their degrees.

**Regents action:** Further consideration. This recommendation requires further study.

c. Expand special programs to attract minorities to graduate study and the teaching and research professions and appoint a task force to study this issue intensively and make recommendations to the Regents. Without more minority graduate students, colleges and universities will be unable to meet their affirmative action goals for diversifying their faculties and staffs and extending employment opportunity to groups traditionally excluded from the scholarly and administrative ranks of academia.

**Regents action:** Approved.

d. Urge an increase in funding for the Einstein and Schweitzer professorships as well as an increase in their number, so that New York State can bring more of the very best scholars from outside the state to enhance the strengths of our present faculties.

**Regents action:** Deferred. While this recommendation is similar to a position the Regents took in the 1984 Statewide Plan, actions since then may have made it obsolete. In this Plan, the Regents discontinued that 1984 action. Therefore, the Regents defer action on this recommendation by the independent sector.

e. Urge the enhancement of research activities and opportunities necessary to help New York compete more effectively, through the creation of research grant programs in fields essential to the state's growth and development.

**Regents action:** Approved.

f. Recommend establishment of a state-funded Equipment Replacement Matching Grant Program at both the undergraduate and graduate levels for the upgrading and replacement of instrumentation, science, engineering and research equipment.

**Regents action:** Approved.

g. Recommend the continuation at increased funding levels and expansion of the number of Centers for Advanced Technology (CATs) to encourage university-industry research programs in fields with significant potential for the generation of new products, new processes, new business enterprises and new jobs.

**Regents action:** Approved in Principle.

h. Recommend the creation of new multidisciplinary centers for advanced scientific research that, unlike the CATs, would focus on basic research in new and emerging fields of scholarly investigation.

**Regents action:** Approved in Principle.

5. Adult and Specialized Education. The Regents should:

a. Urge increased participation by the state in adult and continuing education planning, in response to industry needs for skilled employees and workers' needs to upgrade or learn new skills.

**Regents action:** Approved.

b. Focus on the development of state-aided programs to expand day care facilities and job placement programs.

**Regents action:** Approved.

c. Urge the enhancement of programs for the elderly including studies of their needs and ways in which they can continue to be productive and satisfied members of society.

**Regents action:** Approved.

6. Pre-College Education. The Regents should:

a. Support the development of programs in scientific and technical literacy, encouraging close interaction by institutions at all levels of the education systems. This is essential not only to increase the understanding of science and technology throughout the general population but to enhance the likelihood of students entering scientific and technical occupations.

**Regents action:** Approved.

b. Propose expansion of programs like STEP and C-STEP in which colleges work with minority high school students to orient them to scientific and technological professions in which minorities are both needed and underrepresented.

**Regents action:** Approved.

7. Role of the Regents. The Regents should:

a. Promote better understanding among policymakers of the educational and fiscal value of maintaining a truly diverse and accessible postsecondary system in which the independent sector is a key element.

**Regents action:** Approved.

b. Take a leadership role in reviewing present and future regulatory practices with a view toward promoting more voluntary action by colleges and universities and fewer legislative or regulatory remedies, to meet the state's needs to assure the fair application of policies and the well-being of students.

**Regents action:** Further consideration. This recommendation requires further study.

c. Encourage the President of the University of the State of New York to use his unique position as the state's central spokesman on educational issues to lead a public advocacy effort dedicated to preserving and strengthening New York State's intellectual heritage. Meeting the challenges facing our entire educational system requires a dynamic and flourishing higher education enterprise of undergraduate and graduate education and of research.

**Regents action:** Approved.

## III. The Independent Sector—In the Public Service

This chapter briefly introduces the sector plan, noting the historic role of education in New York State.

## IV. The Independent Sector—An Overview

In this chapter, the scope and breadth of the independent sector is briefly noted: 135 colleges and universities with 141 campuses: 50 in New York City, 39 in the adjacent metropolitan counties; 26 in other urban areas of the State; and 26 in rural areas, enrolling 391,650 students in all, 74 percent of whom are residents of New York State. It notes that 60 percent of the sector's institutions have fewer than 2,000 students, but that the sector also includes research universities, graduate programs, and professional schools that enroll 66 percent of all graduate and professional students in the State. The variation among independent insti-

tutions is noted as promoting diversity leading to opportunities for choice.

## V. Mission Priorities

Ten goals are set forth within the sector's mission of creating and disseminating knowledge through research, teaching, and service:

- identifying and responding to the evolving demands of our society;
- cultivating a climate for cultural vibrancy and intellectual integrity;
- developing a citizenry imbued with a sense of civic responsibility and a devotion to the values of democracy and freedom;
- creating paths of opportunity for society's disadvantaged groups;
- producing citizens capable of the innovation and invention necessary to sustain our nation's impetus for economic development and thereby increase its leadership and competitiveness in world markets;
- producing a skilled work force able to meet new and critical challenges in diverse, emerging, and sometimes still uninvented occupations;
- making new discoveries or updating knowledge and understanding through scholarly pursuits which will expand the capacities and intellectual frontiers of both the individual and society as a whole;
- transferring the products of research to the community for the common benefit;
- enabling the students we educate, through example and by fueling their imaginations, to lead meaningful and productive lives;
- addressing the multidimensional social problems afflicting disadvantaged segments of our society.

## VI. Goals

This chapter focuses on four goals:

*Excellence*. "The Regents must insist on state and institutional policies which protect and enhance our system's excellence." This "requires...academic freedom...which would be stifled by the conformity that inexorably sets in with legislative and regulatory pressures for institutional homogeneity." A second requirement is "adequate resources to meet the growing costs of teaching and research and a commitment to the value of teaching as a profession and research as a vocation." A third is "assurance that higher education be accessible to families at all income levels."

*Opportunity*. The higher educational system should "provide equal opportunity to postsecondary education for all New Yorkers interested in participating" while allowing students "to choose among a diverse array of institutions, the ones they consider most appropriate for their needs and most conducive to their success."

*Accountability*. "Providers of funds need to be sure that those funds are being put to the purposes intended and are having the effects desired." The independent sector will "work with state officials in the coming years to clarify mutual goals and to seek a better understanding of the methods of evaluation and their efficacy."

*Adaptability*. "The institutions and the University of which they are a part must have the capability and flexibility to respond more effectively to environmental change." Among other things, "Closer ties must be forged with appropriate state and business entities to ensure that our efforts are contributing to the needs and requirements of today."

## VII. Assuring Full Participation in Society for All New Yorkers

This chapter discusses the steps being taken by independent institutions to address this issue. In the area of *Outreach*, it notes the development of cooperative relationships with elementary and secondary schools, especially to assist minority and disadvantaged youth. In *Recruitment and Retention*, it indicates that independent colleges are intensifying efforts to recruit and retain minority students. It notes the difficulty of increasing minority faculty because of the small numbers of minorities in Ph.D. programs and suggests that the State "convene a special task force to explore ways in which minority enrollment in Ph.D. programs can be increased." The Regents agree; they are proposing a similar action (11) in this Plan. Under the topic, *Student Support Services*, this chapter reviews some of the ways independent colleges are seeking to assist students with academic deficiencies or physical disabilities. These include learning centers, tutoring, counseling centers, and HEOP programs for disadvantaged students. For the disabled, colleges are both providing support services and improving the accessibility of their facilities.

## VIII. Assisting in the Economic Resurgence of New York State

In the area of *Research*, this chapter points out the important role played by independent institutions in conducting research and collaborative efforts with government, business, and industry. Under the topic, *Graduate Education*, it notes a need to increase the number of persons entering graduate study, particularly in the physical and biological sciences and engineering. It also notes increasing needs in the fields of economics, the mental health professions,

nursing, human resource management, managerial training, health services administration, institutional management, and training services. Under *Adult and Continuing Education*, it notes the development of independent study degree programs and off-campus centers among institutional responses to the needs of working adults to advance their knowledge and skills. In the area of *Continuity and Cooperation*, the chapter recognizes the need for interinstitutional and intersector cooperation.

## IX. Enhancing the Quality of Life for New York State Residents

This chapter reviews the ways independent institutions are addressing this issue. In the area of *Addressing the Needs of the Elderly*, it cites programs such as Syracuse University's All University Center program in gerontology. Under *Substance Abuse-Drug Abuse*, it states that independent institutions are seeking to educate about the dangers of drug abuse, staffing drug hotlines, and working with local agencies and hospitals. They are "initiating efforts to work with elementary teachers and parents to develop programs to discourage the use of drugs." The chapter notes that independent institutions are seeking to enhance the quality of life for the *Disabled and Disadvantaged* through the development of new special education and rehabilitation degree programs and development or expansion of other research, teaching, training, and clinical programs of importance for persons with handicapping conditions. Under *Community Service and Outreach*, it says that there has been a proliferation of volunteer activities. It notes the development of "academic credit-bearing internship programs in the community where students apply what they learn to actual work situations." In the area of *Reassessment/ Adaptation* it speaks to the provision of well-educated professionals, noting that there have been recently-approved degree programs in social work, special education, occupational therapy, physical therapy, dietetics, and nutrition. On the topic of *Values and Ethics*, it states that "institutions are integrating ethics into the curriculum" for professionals. *Student Support Systems* notes that independent institutions are seeking to focus on student performance and retention and are making special efforts to assist students during their first two years at college. To improve retention they are developing "early warning systems." Many colleges are studying the feasibility of on-campus day care centers to meet the needs of students who have children. Under *Citizenship*, it notes that institutions have developed core curricula and encouraged community service. In the area of *International Awareness/ Educating for a Global Economy* it notes the continued availability of study-abroad programs. *Assessment* says that colleges have developed intensive program review systems, testing and retesting student progress. Under the topic, *Cultural Programs and Awareness*, the chapter cites activities by independent colleges and universities to work with libraries, museums, and cultural organizations to improve the quality of life.

## X. Making the Most Effective Use of Resources

In the area of *Institutional Quality*, this chapter notes that assessment of quality is an ongoing process. Methods of evaluation include studies of the success of graduates in finding placement, of student performance on professional examinations, and of on-campus surveys of student needs. To implement *Cost Control*, institutions seek to improve their physical plants and to increase energy conservation. Many require open bidding on major renovations and construction, in order to obtain the lowest possible price for these services. Other measures are also noted. Discussing *Tuition and Fee Rates*, the chapter says that they "are increased only after all economies have been pursued and only as much as necessary to maintain a balanced budget – one that will adequately compensate employees, respond to the operating needs of the institution's facilities and recognize new initiatives and program enhancements necessary to maintain the academic quality of the institution." It states that "independent institutions estimate annual future increases in tuition and fees at or near the increases in the Consumer Price Index." Under the topic of *Access*, it notes that three-quarters of all independent college students receive some student aid. Because Federal student aid has not kept pace with increases in the cost of education, independent institutions have increased "institution-funded" aid. "Since 1982, independent institutions have doubled or more the amount of institution-funded aid for students." In the area of *Enrollment Planning*, the chapter points out that, to prepare for demographic changes, institutions are pursuing initiatives in recruitment, retention, and adaptation. Under *Development Programs*, it cites efforts to increase revenues from external sources.

## XI. Tuitions, the Cost of College and Government Aid

This is the first of six chapters that review Special Sector Concerns. It examines factors influencing the cost to institutions of providing educational services. Between 1974 and 1984, while the Consumer Price Index increased 110 percent, non-professional wages at colleges rose by 200 percent and institutionally-funded student aid rose by 230 percent. It notes the decline in the share of funding for research equipment provided by the Federal government from 30 percent to 12 percent over 20 years.

Focusing on *Student Aid*, the chapter states that independent colleges provided $260 million in grants from their own resources in 1985, and $460 million in 1988. It

asserts that "independent colleges in New York State have attempted to make up the difference in need-based student aid with their own funds (largely from tuition and fees)..." It points out that the "lack of government-funded student aid and funding for research pushes tuitions upward. Tuition increases have accelerated since 1981 when government's commitment to student aid and research began to seriously lag behind CPI...."

In the areas of *Faculty Salaries*, the chapter notes a continuing need to offset erosion in the purchasing power of faculty salaries.

## XII. Minority Recruitment and Retention

This chapter points out the independent sector's success in educating minority students. It asserts that the sector's institutions are losing minority enrollments largely because of "financial constraints on both the individuals and the institutions." It reviews the roles of such State programs as HEOP, the Stay in School Partnership program, STEP, the Regents Professional Opportunity and Health Care Opportunity Scholarships, and the Teacher Opportunity Corps, and discusses the funding needs of those programs.

## XIII. Research, Graduate and Professional Schools

This chapter examines the independent sector's role in graduate and professional education and research. It points out that over 80 percent of Federal research spending in the State in 1984 was at independent institutions. It identifies "five concerns which must be addressed if New York's rank in graduate education and research is to be improved":

- shortages of highly trained talent in key fields, including the sciences, mathematics, and engineering;
- increasing difficulty in attracting and retaining high quality faculty;
- loss of talented students, especially women and minorities;
- deterioration of the infrastructure that supports graduate research and training;
- potential diminution of scholarship in some fundamental fields, particularly in the humanities and social sciences.

## XIV. Economic Development

In this chapter, the economic impact of the independent sector is estimated at almost $20 billion in 1985.

## XV. Preparation of the Workforce of the Future

This chapter points out that the number of jobs requiring a college degree is projected to "increase by 45 percent between 1985 and 1995," nationally. It asserts that "The high school diploma as the primary focus of education public policy is outdated. It is essential to the future of the State's economy that the State's education public policy objective must be to make a college education a realistic goal for the majority of its citizens." It states that "Over the next three years, New York State's economy will require approximately 140,000 more college graduates with four-year degrees than will graduate from all colleges and universities in New York State." It also notes the loss of graduates to other states. It proposes development of "student career/work related programs" to link students with educationally-related part-time jobs in the business community.

## XVI. Adaptability/Flexibility—The Non-Traditional Student

This chapter discusses the effectiveness of the Stay in School Partnership program, Upward Bound, and similar programs that call for partnerships between colleges and schools. It also examines services to non-traditional students and notes various independent institutional programs that serve them.

*Appendix A*

# EDUCATIONAL OPPORTUNITY CENTERS

Educational Opportunity Centers (EOCs) are a significant part of New York's programs serving educationally and economically disadvantaged students at the postsecondary level. This review of EOCs is based principally on a report to the Regents in the fall of 1986. It represents the most recent information available.

In the late 1960's, the Governor, with the support of the Legislature, authorized the creation of four Urban Centers and seven Cooperative College Centers in order to improve educational services to New York State's disadvantaged people. These centers, administered by the State University of New York, offered occupational, remedial, and college preparatory programs.

In its 1972 Master Plan, SUNY recommended that the two types of centers be merged into Educational Opportunity Centers in order to provide easier access to postsecondary institutions by the disadvantaged population. The Master Plan recommended:

> Educational opportunity centers will be located in every major region of the State for the use of those whose educational preparation has been deficient. The centers will provide appropriate counseling and diagnostic testing for college readiness.[1]

The Regents approved this recommendation in the 1972 Statewide Plan by the following language:

> I. The Students
>
> A. The Points of Entry
>
> 1. Educational opportunity centers will be located in every major region of the State for the use of those whose educational preparation has been deficient. The centers will provide appropriate counseling and diagnostic testing for college readiness.
>
> Regents Position: APPROVED.[2]

The Governor approved the merger upon acceptance of the 1972 Statewide Plan.

Since 1973, over 120,000 individuals have been served by EOC preparatory programs and supportive services. In addition to providing tuition-free occupational, remedial, and college preparatory programs, the centers offer educational counseling and specialized referral services for local community residents.

## Objectives

According to the 1986-87 SUNY General Plan and Guidelines for EOCs, the EOC program has five major objectives:

1. To provide instructional programs and supportive services designed to expand life options and meet educational needs and interest of educationally and economically disadvantaged students.
2. To provide instructional programs and supportive services aimed at qualifying educationally and economically disadvantaged students for college enrollment.
3. To provide career readiness through occupational training intended to assist educationally and economically disadvantaged students to secure employment and further occupational training.
4. To complement interinstitutional programs and services for educationally and economically disadvantaged students.
5. To expand awareness of public and independent postsecondary educational opportunities for the educationally and economically disadvantaged and the public in general.[3]

## Organizational Structure

The State University of New York Office of Special Programs administers the EOC programs through sponsoring

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[1] *Reaffirmation and Reform, Building a Comprehensive University for the '70's, The 1972 Master Plan of the State University of New York*. State University of New York, Albany, New York, p. 19.

[2] *Education Beyond High School, The Regents Statewide Plan for the Development of Post-Secondary Education, 1972*. The University of the State of New York, The State Education Department, Albany, New York, November 1972, p. 189.

[3] *General Plan and Guidelines for the Educational Opportunity Centers of State University of New York 1986-87*. State University of New York Office of Special Programs, State University Plaza, Albany, New York, p. 7.

**Table 1.**
**EOC's AND THEIR SPONSORING INSTITUTIONS**

| *Centers* | *Sponsoring Institutions* |
|---|---|
| Bronx EOC<br>Washington Ave. between<br>168 and 169th<br>(block 2373, lots 3-12) | Westchester Community College |
| Brooklyn EOC<br>470 Vanderbuilt Avenue<br>Brooklyn | New York City Technical<br>College, CUNY |
| Buffalo EOC<br>465 Washington Street<br>Buffalo | SUNY at Buffalo |
| Capital District EOC<br>145 Congress Street<br>Troy<br>Satellite in Westgate<br>Shopping Plaza<br>Albany | Hudson Valley Community<br>College |
| Long Island EOC at SUNY<br>College of Technology at<br>Farmingdale<br>Satellite in Hempstead<br>Satellite in Brentwood | SUNY College of Technology at<br>Farmingdale |
| Manhattan EOC<br>163 West 125th Street<br>Adam Clayton Powell Jr.<br>State Office Building | Borough of Manhattan Community<br>College, CUNY |
| Queens EOC<br>(negotiations underway<br>for a site in Jamaica) | York College, CUNY |
| Rochester EOC<br>305 Andrews Street<br>Rochester | SUNY College at Brockport |
| Syracuse EOC<br>100 New Street<br>Syracuse | SUNY College of Agriculture<br>and Technology at Morrisville |
| Westchester EOC<br>41 Main Street<br>Yonkers | Westchester Community College |

two- and four-year SUNY and CUNY colleges which are called sponsoring institutions. The Office of Special Programs provides guidelines for basic program standards, and organization and operations for the total program, as well as assistance to local sponsoring institutions for staff development, evaluation, record keeping, and reporting, evaluating and monitoring operations.

Sponsoring institutions administer respective center operations through a site director. The institutions provide staffing and payroll, facilities and maintenance, security, purchasing of equipment and supplies, student enrollment procedures and reporting for the centers. Although the sponsoring College is responsible for EOC facility operations, SUNY requires that each center be recognizable as a special unit and an integral part of the statewide EOC program.

The eight operating Educational Opportunity Centers are located in urban areas. The centers in Buffalo, Farmingdale, Rochester, and Syracuse are administered by SUNY campuses, while those in Brooklyn, the Capital District, Manhattan, Schenectady, and Westchester are operated by community colleges on a contractual basis. A separate counseling/outreach site is located in Schenectady and is administered by Schenectady County Community College; this site conducts no classroom programs. Additional State funds were appropriated in the 1985-86 State fiscal year for two new centers, to be located in the Bronx and Queens during 1986-87. Individual centers and their sponsoring institutions are listed in Table 1.

## Fiscal

The Educational Opportunity Centers are financed primarily from funds appropriated by the State Legislature and allocated by State University. Supplemental funding may also be secured by each center.

The State allocation for an EOC is based on the actual full-time equivalent enrollment in the prior year. In 1980-81, the EOCs had a State appropriation of $13.5 million. In the 1988-89 fiscal year, it is $27.4 million, a 103 percent increase over eight years. Tables 2 and 3 (pages 86-87) show State appropriations for the period 1980-81 through 1986-87, and the total funding for 1984-85, respectively. Tables 4 and 5 (pages 88-89) show computation of cost per FTE for 1980-81 and 1981-82, and computation of cost per total enrollment and FTE for 1984-85.[4]

## Staffing

The sponsoring institution is responsible for employing staff to conduct EOC programs. The Vice Chancellor for Student Affairs and Special Programs at State University determines the overall administrative structure.

The sponsoring institution appoints a director who reports directly to the institution's president or vice president. The center director, with the approval of the sponsoring institution, appoints coordinators for academic affairs, business affairs, student personnel services, and program development and research. Each coordinator is responsible for organizing the area, evaluating personnel, maintaining records, and budgeting.[5]

Projected full-time student equivalent (FTE) enrollments determine the numbers of EOC instructional and counseling staff. The SUNY Office of Special Programs develops formulas for converting headcount enrollment into FTE enrollment. The current FTE formula establishes that 450 contact hours equal one FTE.[6]

EOC program staff serve in accordance with regulations and procedures governing personnel in similar categories at the sponsoring institution. Their compensation and benefits are provided in accordance with policies of the sponsoring institution and the State University of New York.

The faculty and other staff under the director's leadership are responsible for establishing standards for academic performance and course content. Staff are expected to counsel students who are being dropped from the program, or who are withdrawing from it. Such counseling usually takes the form of helping the students find academic or occupational alternatives which pertain to their interests, needs, and capabilities.[7]

In the 1984-85 program year, EOC's employed 760 full-time and part-time personnel. The mean number of staff (full- and part-time) per center was 95 (see Table 6, page 92).

## Facilities

The sponsoring institution obtains and maintains EOC facilities with the approval of the Office of Special Programs. Site rental costs are paid from the State appropriation for the individual center. Each EOC must have a clear programmatic and physical identity as a special unit operating as an integral part of SUNY. Table 7 (page 93) provides site information for each EOC.

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[4] *General Plan and Guidelines for the Educational Opportunity Centers of the State University of New York 1986-87*. State University of New York Office of Special Programs, State University Plaza, Albany, New York, p. 15.

[5] Ibid, p. 16.

[6] Ibid, p. 16.

[7] Ibid, p. 16.

Table 2. STATE APPROPRIATION FOR EOCS FOR 1980-81 THROUGH 1986-87

| Center | State Appropriations | | | | | |
|---|---|---|---|---|---|---|
| | 1980-81* | 1981-82* | 1982-83** | 1983-84** | 1984-85** | 1986-87** |
| Brooklyn | $3,226,840 | $3,525,174 | $3,761,080 | $4,088,100 | $4,633,500 | $4,855,300 |
| Buffalo | 1,737,456 | 1,829,900 | 1,968,685 | 2,237,800 | 2,482,400 | 2,713,400 |
| Capital District | 1,725,001 | 1,929,294 | 2,006,888 | 2,242,300 | 2,476,600 | 2,852,700 |
| Long Island | 1,699,961 | 1,896,569 | 1,969,270 | 2,229,200 | 2,114,000 | 2,668,100 |
| Manhattan | 1,486,083 | 1,731,360 | 2,347,850 | 2,527,100 | 2,587,100 | 3,089,600 |
| Rochester | 1,206,691 | 1,322,000 | 1,427,100 | 1,598,800 | 1,806,200 | 1,989,600 |
| Syracuse | 895,727 | 942,900 | 1,068,875 | 1,163,600 | 1,238,800 | 1,413,800 |
| Westchester | 1,515,466 | 1,612,260 | 1,400,172 | 1,534,800 | 1,555,300 | 1,828,300 |
| Subtotal | 12,492,225 | 14,789,427 | 15,945,920 | 17,691,500 | 18,893,900 | 21,410,800 |
| Schenectady | NA | NA | 64,280 | NA | 72,200 | 83,700 |
| New Centers | 0 | 0 | 0 | 0 | 0 | 1,800,000 |
| Total | $13,492,225 | $14,789,427 | $16,010,200 | $17,691,500 | $18,966,100 | $23,294,500 |

Source: *Statewide Review of EOC Program Administered by SUNY, Report AL-ST-1483, NYS Department of Audit and Control, Exhibit C.

**New York State Executive Budget (for fiscal year shown).

Table 3. EOC TOTAL FUNDING, 1984-85

| Center | State Appropriation | Other Grants | Total |
|---|---|---|---|
| Brooklyn | $4,633,500 | $57,189 | $4,690,689 |
| Buffalo | 2,482,400 | 22,991 | 2,690,689 |
| Capital District | 2,476,600 | 134,770 | 2,611,370 |
| Long Island | 2,114,000 | 110,929 | 2,224,929 |
| Manhattan | 2,587,100 | 32,843 | 2,619,943 |
| Rochester | 1,806,200 | 138,316 | 1,944,516 |
| Syracuse | 1,238,800 | 203,975 | 1,442,775 |
| Westchester | 1,555,300 | 918,196 | 2,473,496 |
| Subtotal | 18,832,900 | 1,619,209 | 18,893,900 |
| Schenectady | 72,200 | 0 | 72,200 |
| Total | $18,966,100 | $1,619,209 | $20,585,309 |

Source: Educational Opportunity and Outreach Counseling Center Program, 1984-85 Annual Report. SUNY, Office of Special Programs, State University Plaza, Albany, NY.

Table 4. EOC COMPUTATION OF COST PER FTE STUDENT FOR 1980-81 AND 1981-82

| Center | 1980-81 Total Cost | 1980-81 FTE Students | 1980-81 Cost Per FTE Student | 1981-82 Total Cost | 1981-82 FTE Students | 1981-82 Cost Per FTE Student |
|---|---|---|---|---|---|---|
| Brooklyn | $3,226,840 | 1,359 | $2,374 | $3,525,174 | 1,743 | $2,022 |
| Buffalo | $1,737,456 | 972 | $1,788 | $1,829,900 | 1,025 | $1,785 |
| Capital District | $1,725,001 | 1,080 | $1,597 | $1,929,264 | 1,112 | $1,735 |
| Long Island | $1,699,961 | 992 | $1,714 | $1,896,569 | 1,066 | $1,779 |
| Manhattan | $1,485,083 | 923 | $1,609 | $1,731,360 | 1,036 | $1,671 |
| Rochester | $1,206,691 | 711 | $1,697 | $1,322,000 | 736 | $1,796 |
| Syracuse | $895,727 | 646 | $1,387 | $942,900 | 708 | $1,332 |
| Westchester | $1,515,466 | 610 | $2,484 | $1,612,260 | 729 | $2,212 |
| Total | $13,492,225 | 7,293 | | $14,789,427 | 8,155 | |
| Averages | | | $1,850 | | | $1,814 |

Source: Statewide Review of EOC Program Administered by SUNY, Report AL-ST-1483, NYS Department of Audit and Control, Exhibit C.

Table 5. EOC COMPUTATION OF COST PER TOTAL ENROLLMENT AND FTE FOR 1984-85

| Center | Total Cost* | Enrollment | FTE* | Cost Per FTE |
|---|---|---|---|---|
| Brooklyn | $4,690,689 | 2,293 | 1,413 | $3,320 |
| Buffalo | $2,690,689 | 1,456 | 931 | $2,890 |
| Capital District | $2,611,370 | 1,314 | 851 | $3,069 |
| Long Island | $2,224,929 | 1,753 | 914 | $2,434 |
| Manhattan | $2,619,943 | 1,868 | 1,008 | $2,599 |
| Rochester | $1,944,516 | 1,051 | 687 | $2,830 |
| Syracuse | $1,442,775 | 955 | 538 | $2,682 |
| Westchester | $2,473,496 | 598 | 548 | $4,513 |
| Subtotal | $20,513,109 | 11,288 | 6,890 | $2,977 |
| Schenectady | $72,200 | 214 | NA | NA* |
| Total | $20,585,309 | 11,502 | -- | -- |

Source: *Educational Opportunity and Outrearch Counseling Center Program 1984-85 Annual Report. SUNY, Office of Special Programs, State University Plaza, Albany, NY.

## Relationships With Other Entities

The EOCs develop and maintain relationships with many state and local agencies. According to the Office of Special Programs, the EOCs interact with: the State Departments of Social Services, Correctional Services, Mental Hygiene, Health, and Labor; the Office of Vocational Rehabilitation, the State Office of Drug Abuse Services, Division for Youth in New York City, Council on the Arts; Higher Education Services Corporation; ASPIRA, Inc. (New York City); Urban League; National Association for the Advancement of Colored People; Civil Service Commission; Literacy Volunteers, United Way; Ibero-American League, YMCA; YWCA; League of Women Voters; specialized schools, community action agencies, civil organizations, and neighborhood recreational associations.[8] The Office of Special Programs also encourages the centers to work with existing day care providers.

## People Served

Of the more than 11,800 persons enrolled in EOC programs in 1985-86, 54.7 percent were black; 0.5 percent, native American; 1.9 percent, Asian/Pacific islander; 18.0 percent, Hispanic; 21.9 percent, white; and the remaining 2.9 percent were "Other." SUNY 1985-86 statistics reflect a composite average male student who is 29 years old, single, unemployed, with an annual family income of $6,631 and with an 8.1 grade level in reading. A composite average female student is 29 years old, single, unemployed, with an annual family income of $6,215, and an 8.1 grade level in reading.[9] According to the SUNY Office of Special Programs, continuous EOC outreach efforts provide an educational alternative to dislocated workers, displaced homemakers, ex-offenders, handicapped, school dropouts, and veterans.

## Eligibility

All students enrolled in EOC programs must be residents of New York State, 18 years of age, and meet specific economic eligibility criteria established by each center. Where applicants for certain programs exceed the number that can be admitted, the center gives priority to applicants who are historically, educationally, economically, and culturally disadvantaged. Centers typically enroll individuals who lack a high school diploma, have difficulty speaking English as a second language, have limited vocational skills, and have poorly developed reading, mathematical, and decision-making skills.

## Programs

EOC programs are designed to prepare students to enter job training or college preparatory programs. Typical tuition-free program features at many EOCs include continuous admission, individualized instruction, and dual enrollment, e.g. participation in simultaneous vocational skills training and high school equivalency. Each program includes student counseling as well as placement assistance. Counseling and referral services also may be provided to individuals regardless of eligibility status. (See Tables 8 and 9 [pages 94-95] for lists of programs and headcount enrollment.)

Courses which prepare students for college emphasize verbal, written, mathematical, and problem-solving skills. College preparatory courses are combined, where feasible, with vocational programs.

Vocational programs are designed according to the SUNY General Plan and Guidelines for EOCs. They are required to:

> reflect consideration of projected local, regional and state labor market demands, as well as other manpower information sources, and documented research showing that a need has not been met by other programs for which economically and educationally disadvantaged students would be eligible; prepare students for specific job opportunities available in each center's service area; lay the foundation for employment in more than one field and beyond the center's service area; and mesh students' needs in the cognitive and affective domains with their needs of occupational skills.[10]

Sometimes EOCs enter informal arrangements with other agencies, such as local employment and training and civil service agencies. These agreements often result in courses for employability life skills and programs for retraining dislocated workers.

As shown in Table 10 (page 96), of the 13,575 EOC headcount enrollments in 1984-85, 26 percent completed programs and 31 percent withdrew prior to completion. While no specific data are available, an assumption is that the remaining 43 percent continued in EOC programs. Of those students who completed programs during 1984-85, 12 percent were placed in postsecondary institutions and 30 per-

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[8] *General Plan and Guidelines for the Educational Opportunity Centers of State University of New York 1986-87.* State University of New York Office of Special Programs, State University Plaza, Albany, New York, pp. 17-18.

[9] Presentation on the University's Educational Opportunity Centers to the State University Trustees, February 24, 1988.

[10] *General Plan and Guidelines for the Educational Opportunity Centers of State University of New York 1986-87.* State University of New York Office of Special Programs, State University Plaza, Albany, New York, p. 10.

cent were placed in employment. The remaining 58 percent of program completers were categorized as "Other."

## Program Review

SUNY's Office of Special Programs conducts reviews of EOC programs. These reviews include the analyses of the following reports submitted by EOC program directors: the tri-annual Instructional Program Proposal (IPP), the annual revisions of the IPP, the monthly enrollment and expenditure reports, and the fall and spring enrollment reports.

The Education Department's Office of Higher and Continuing Education does not review EOC programs or courses since these are not offered for college credit nor are they part of degree programs. Review by the Department has been limited to that provided by the Bureau of Veterans Education. This Bureau reviews EOC programs only if a veteran is enrolled, pursuant to Federal guidelines. The purpose is to ensure that the programs include facilities, materials, and instruction that meet the Federal criteria for eligibility for enrollment of veterans.

The Regents National Program of Noncollegiate Sponsored Instruction also has reviewed a limited number of vocational courses offered by the Westchester and Yonkers EOCs at the request of local employment and training agencies and civil services agencies. Where appropriate, PONSI recommended that colleges grant credit.

## Actions

To enhance services to EOC students, in this Plan the Regents take the following action:

- **To provide expanded and enriched experiences and opportunities for Educational Opportunity Center students, the Regents urge colleges and universities to form consortia with SUNY and CUNY campuses that sponsor EOCs in a manner similar to collaborative activities with the schools. They also request that State University prepare, after consulting with City University, a plan for the development and operation of the Educational Opportunity Centers and submit it to the Regents and the Governor as part of SUNY's 1990 Progress Report (7).**

Table 6. EOC STAFFING, 1984-85 (a)

| EOC | Administrative | Instructional | Counseling | Clerical | Maintenance | Total |
|---|---|---|---|---|---|---|
| Brooklyn | 15 | 99 | 14 | 32 | 12 | 172 |
| Buffalo | 13 | 44 | 15 | 13 | 1 | 86 |
| Capital District | 10 | 36 | 8 | 17 | 5 | 76 |
| Long Island | 18 | 112 | 11 | 27 | 6 | 174 |
| Manhattan | 12 | 44 | 8 | 18 | 6 | 88 |
| Rochester | 5 | 30 | 12 | 11 | 10 | 68 |
| Syracuse | 5 | 19 | 6 | 7 | 0 | 37 |
| Westchester | 6 | 31 | 8 | 10 | 4 | 59 |
| Total | 84 | 415 | 82 | 135 | 44 | 760 |

(a) Includes full-time and part-time faculty.

Source: State University of New York Office of Special Programs 1984-85 Educational Opportunity and Outreach Counseling Center Program Annual Report, State University of New York, Office of Special Programs, State University Plaza, Albany, NY, p. 20.

Table 7. EOC FACILITIES ARRANGEMENTS, 1984-85

| EOC & Sponsor | Number of Operational Sites | Location | Space | Lease Arrangements |
|---|---|---|---|---|
| Brooklyn (NYCTC) | 1 Main Center | Brooklyn | 90,000 SQ. FT. | Annual Lease ($480,000) |
| Buffalo (SUNY Buffalo) | 1 Main Center | Buffalo | 60,000 SQ. FT. | Annual Lease ($240,000) University of Buffalo |
| Capital District (Hudson Valley CC) | 1 Main Center | Troy | 44,000 SQ. FT. | Annual Lease ($235,000) Private Landlord |
| | 1 Satellite | Albany | 99,000 SQ. FT. | Annual Lease ($99,000) Private Landlord |
| Long Island (SUNY Farmingdale Ag & Tech College) | 1 Main Center | Farmingdale Campus | 12,287 SQ. FT. | No Lease-Located on Sponsor Facility |
| | 1 Satellite | Hempstead | 13,516 SQ. FT. | Annual Lease ($71,000) Private Landlord |
| | 1 Satellite | Brentwood | 20,712 SQ. FT. | Annual Lease ($80,000) Private Landlord |
| Manhattan (Manhattan CC) | 1 Main Center | Harlem | 2 Floors | No Lease State Landlord |
| Rochester (SUC Brockport) | 1 Main Center | Rochester | 43,500 SQ. FT. | No Lease State Landlord |
| Syracuse (SUNY Morrisville) | 1 Main Center | Syracuse | 35,000 SQ. FT. | Annual Lease ($205,000) Private Landlord/Union |
| Westchester | 1 Main Center | Yonkers | 2 Floors | Annual Lease ($180,000) |

Source: Educational Opportunity Centers Expansion Feasibility Study Final Report, Volume III. Arawak Consulting Coroportion, New York, NY, December 1985, p. 2.

Table 8. EOC PROGRAM OFFERINGS AND ENROLLMENTS (HEADCOUNT)
1984-85

| | Brooklyn EOC | | Buffalo EOC | | Capital District EOC | | Long Island EOC | | Manhattan EOC | | Rochester EOC | | Syracuse EOC | | Westchester EOC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 |
| Basic Education | | 352 | | 452 | | | 206 | | | 480 | 18 | | | | | 105 |
| College Preparation | | 88 | | 151 | | | | | | 60 | 156 | | | | | |
| English as a Second Language | | 88 | | | | | | | | 200 | 65 | | | | | 106 |
| Total Academic | | 528 | | 603 | 213 (b) | | | | | 740 | 239 | | | | | 211 |
| Total Vocational | | 684 | | 167 | 640 | | 40 | | | 344 | 296 | | 130 | | | 190 |
| Total Enrollments (a) | | 1,212 | | 770 | 853 | | | | | 1,084 | 535 | | | | | 401 |

(a) Total includes only Daytime Program Enrollments. Separate Total Evening Enrollments were Reported in 1984-85 but for many Centers, no Program-by-Program subtotals were available.

(b) Estimated.

Source: Educational Opportunity Centers Expansion Feasibility Study Final Report, Volume II. Arawak Consulting Corporation, New York, NY, December 1985, p. 2.

Table 9. EOC PROGRAM OFFERINGS AND ENROLLMENTS (PERCENT)
1984-85

| | Brooklyn EOC | | Buffalo EOC | | Capital District EOC | | Long Island EOC | | Manhattan EOC | | Rochester EOC | | Syracuse EOC | | Westchester EOC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 | 84-85 | 85-86 |
| Academic Enrollments (%) | | 43 | | 78 | 25 | | | | | 68 | 41 | | | | | 53 |
| Vocational Enrollments (%) | | 57 | | 22 | 75 | | | | | 32 | 59 | | | | | 47 |
| Total (%) | | 100 | | 100 | 100 | | | | | 100 | 100 | | | | | 100 |

Source: Educational Opportunity Centers Expansion Feasibility Study Final Report, Volume II. Arawak Consulting Corporation, New York, NY, December 1985, p. 2.

Table 10. OVERALL EOC PROGRAM OUTCOMES, 1984-85

| | | |
|---|---|---|
| Total Enrollments | 13,575 | 100% |
| Completions | 3,472 | 26% |
| Withdrawals | 4,244 | 31% |
| Continuing | 5,859 | 43% |
| Total Completions | 3,472 | 100% |
| Employed | 1,041 | 30% |
| Education | 416 | 12% |
| Other | 2,015 | 58% |
| Total Withdrawals | 4,244 | 100% |
| Positive (1) | 255 | 6% |
| Nonpositive (includes unknown) | 3,989 | 94% |

(1) Positive = Transfer to Other Training/Education, Entry into Employments, Entry in Military

Nonpositive = Poor Attendance

Source: State University of New York, Office of Special Programs 1984-85 Educational Opportunity and Outreach Counseling Center Program Annual Report. State University of New York, Office of Special Programs, State University Plaza, Albany, NY.

Table 11. INDIVIDUAL EOC PROGRAM OUTCOMES, 1984-85

| Center | Enrolled | Completed | Placements | Placements | Employment Placements |
|---|---|---|---|---|---|
| Brooklyn | 2,902 | 1,244 | 63 | 16 | 47 |
| Buffalo | 1,675 | 425 | 111 | 89 | 22 |
| Capital District | 1,598 | 603 | 445 | 28 | 417 |
| Long Island | 1,808 | 294 | 317 | 106 | 211 |
| Manhattan | 2,315 | 313 | 128 | 33 | 95 |
| Rochester | 1,248 | 271 | 216 | 86 | 130 |
| Syracuse | 1,305 | 107 | 68 | 43 | 25 |
| Westchester | 724 | 215 | 109 | 15 | 94 |
| Total | 13,575 (a) | 3,472 | 1,457 | 416 | 1,041 |

(a) Total enrollments include both regular programs and summer programs. Regular program total enrollment = 11,288 for 1984-85.

Source: State University of New York, Office of Special Programs 1984-85 Educational Opportunity and Outreach Counseling Center Program Annual Report. State University of New York, Office of Special Programs, State University Plaza, Albany, NY.

*Appendix B*

# MASTER PLAN AMENDMENTS APPROVED BY THE REGENTS

November 1, 1986, through October 31, 1988

## THE CITY UNIVERSITY OF NEW YORK

**The City University of New York (9/16/88)**

Authorization of the City University Trustees to confer the degree of Doctor of Medicine (M.D.) extended to September 30, 1990.

Awaiting action by the Governor.

**Brooklyn College (1/21/87)**

Authorized the City University Board of Trustees to confer the degree of Bachelor of Music (Mus. B.) and to establish Mus. B programs in performance and in composition at Brooklyn College.

Approved by the Governor on 3/24/87.

**Brooklyn College (2/26/88)**

Authorized the City University Board of Trustees to confer the degree of Master of Music (M.M.) and to establish M.M. programs in performance and in composition at Brooklyn College.

Approved by the Governor on 3/21/88.

**John Jay College of Criminal Justice (4/22/88)**

Authorized City University to establish a program in computer information systems for criminal justice and public administration leading to the degree of Bachelor of Science (B.S.) at John Jay College of Criminal Justice.

Approved by the Governor on 6/8/88.

**The Graduate School and University Center (10/23/87)**

Authorized the City University Board of Trustees to confer the degree of Doctor of Musical Arts (D.M.A.) and to establish a D.M.A. program in performance at the Graduate School and University Center.

Approved by the Governor on 11/16/87.

## INDEPENDENT INSTITUTIONS

**Bank Street College of Education (9/16/88)**

Authorized the Bank Street College of Education to establish a program in mathematics education leading to the degree of Master Science in Education (M.S. in Ed.).

**Bard College (4/24/87)**

Authorized Bard College to confer the degree of Master of Science (M.S.) and to establish an M.S. program in environmental studies.

**Canisius College (7/24/87)**

Authorized Canisius College to confer the degree of Master of Public Administration (M.P.A.) and to establish an M.P.A. program in public administration.

**The College for Human Services (4/22/88)**

Authorized The College for Human Services to confer the degree of Master of Science (M.S.) and to establish an M.S. program in administration: service agency.

**College of Mount Saint Vincent (2/26/88)**

Authorized the College of Mount Saint Vincent to confer the degree of Master of Science (M.S.) and to establish an M.S. program in nursing.

**The College of New Rochelle (4/24/87)**

Authorized The College of New Rochelle to establish the Rosa Parks Branch Campus, Harlem, and to offer the College's new resources program leading to the degree of Bachelor of Arts (B.A.) at that location.

**D'Youville College (3/25/88)**

Authorized D'Youville College to establish a program in dietetics leading to the degrees of Bachelor of Science (B.S.) and Master of Science (M.S.).

**Elmira College (7/29/88)**

Authorized Elmira College to offer a four-year generic nursing program leading to the degree of Bachelor of Science (B.S.).

**Fordham University (7/29/88)**

Authorized Fordham University to confer the degree of Master of Laws (LL.M.) and to establish LL.M. programs in international business and trade; and in banking, corporate, and financial law.

**Graduate School of Political Management (1/21/87)**

Authorized the Graduate School of Political Management to confer the degree of Master of Professional Studies (M.P.S.) and to establish an M.P.S. program in political management.

**Hofstra University (1/21/87)**

Authorized Hofstra University to confer the degree of Master of Science (M.S.) and to establish an M.S. program in computer science.

**Iona College (10/21/88)**

Authorized Iona College to establish a program in health care management leading to the degree of Master of Business Administration (M.B.A.) at its Rockland Campus.

**Long Island University (12/11/87)**

Authorized Long Island University to establish a program in arts management leading to the degree of Bachelor of Fine Arts (B.F.A.) at its Southampton campus.

**Long Island University (10/21/88)**

Authorized Long Island University to confer the degree of Master of Professional Studies (M.P.S.) at its Southampton Campus, and to establish at the Southampton Campus an M.P.S. program in gerontology.

**Manhattan School of Music (6/19/87)**

Authorized Manhattan School of Music to establish a program in church music leading to the degree of Doctor of Musical Arts (D.M.A.).

**Nazareth College (1/20/88)**

Authorized Nazareth College to confer the degree of Bachelor of Music (Mus. B.) and to establish Mus. B. programs in music performance, music history, music theory, music therapy, and music education "K-12".

**New York Institute of Technology (7/24/87)**

Authorized New York Institute of Technology to establish a program in advertising leading to the degree of Bachelor of Science (B.S.) at its Central Islip campus.

**New York Institute of Technology (12/11/87)**

Authorized New York Institute of Technology to confer the degree of Associate in Occupational Studies (A.O.S.) and to establish an A.O.S. program in culinary arts at its Central Islip campus.

**Nyack College (6/19/87)**

Authorized Nyack College to confer the degree of Master of Arts (M.A.) and to establish M.A. programs in Biblical literature (New Testament emphasis) and Biblical literature (Old Testament emphasis), and intercultural studies.

**Pace University (4/24/87)**

Authorized Pace University to confer the degree of Bachelor of Science in Nursing (B.S. in Nursing) and to establish a program in nursing leading to the degrees of Bachelor of Science in Nursing and Master of Science at its Pleasantville campus.

**Pace University (5/22/87)**

Authorized Pace University to confer the degree of Master of Science for Teachers (M.S.T.) at its main campus and its White Plains campus, and to establish at these locations 17 education programs leading to the M.S.T. degree.

**Rensselaer Polytechnic Institute (7/29/88)**

Authorized Rensselaer Polytechnic Institute to offer a program in science and technology studies leading to the degree of Doctor of Philosophy (Ph.D.).

**Saint Joseph's Hospital Health Center School of Nursing (5/22/87)**

Authorized Saint Joseph's Hospital Health Center School of Nursing to confer the degree of Associate in Applied Science (A.A.S.) and to establish an A.A.S. program in nursing.

**Saint Vladmir's Orthodox Theological Seminary (9/16/88).**

Authorized Saint Vladmir's Orthodox Theological Seminary to confer the degree of Doctor of Ministry (D. Min.) and to establish a D. Min. program in ministry.

**Sisters of Charity Hospital School of Nursing (12/19/86)**

Authorized Sisters of Charity School of Nursing to confer the degree of Associate in Applied Science (A.A.S.) and to establish an A.A.S. program in nursing.

**Touro College (1/20/88)**

Authorized Touro College to confer the degrees of Bachelor of Science (B.S.) and Master of Arts (M.A.) at its branch campus in Huntington and to establish a program in health science/physical therapy leading to the B.S. and M.A. degrees at its Huntington campus.

**Touro College (3/25/88)**

Authorized Touro College to establish a program in interdisciplinary studies leading to the degree of Master of Arts (M.A.) at its Huntington campus.

**Touro College (5/20/88)**

Authorized Touro College to establish a program in health science/occupational therapy leading to the degrees of Bachelor of Science (B.S.) and Master of Arts (M.A.) at its Huntington campus.

**Unification Theological Seminary (11/21/86)**

Authorized Unification Theological Seminary to confer the degrees of Master of Religious Education (M.R.E.) and Master of Divinity (M. Div.) and to establish an M.R.E. program in religious education degree and an M. Div. program in divinity.

## STATE UNIVERSITY OF NEW YORK

**SUNY Buffalo (6/17/88)**

Authorized State University to establish a program in American studies leading to the degree of Doctor of Philosophy (Ph.D.) at the State University of New York at Buffalo.

Awaiting action by the Governor.

**SUNY Buffalo (2/20/87)**

Authorized the State University Trustees to confer the degree of Doctor of Nursing Science (D.N.S.) and to establish a D.N.S. program in nursing at the State University of New York at Buffalo.

Approved by the Governor on 3/13/87.

**SUNY Buffalo (3/20/87)**

Authorized the State University Trustees to confer the degree of Bachelor of Music (Mus. B.) and to establish Mus. B. programs in music education K-12 and in music performance at the State University of New York at Buffalo.

Approved by the Governor on 4/22/87.

**SUNY Stony Brook (4/22/88)**

Authorized State University to establish a program in business management leading to the degree of Bachelor of Science (B.S.) at the State University of New York at Stony Brook.

Approved by the Governor on 5/10/88.

**SUC Cortland (3/20/87)**

Authorized State University to establish a program in communications leading to the degree of Bachelor of Arts (B.A.) at the State University College at Cortland.

Approved by the Governor on 4/8/87.

**SUC New Paltz (3/20/87)**

Authorized State University to establish a program in communications media leading to the degree of Bachelor of Arts (B.A.) and a program in communications media leading to the degree of Bachelor of Science (B.S.) at the State University College at New Paltz.

Approved by the Governor on 4/22/87.

**SUNY College of Agriculture and Technology at Morrisville (12/11/87)**

Authorized State University to establish at Norwich, Chenango County, a branch campus of the College of Agriculture and Technology at Morrisville and to establish the following programs: business: accounting (A.A.S.); business: business administration (A.S. and A.A.S.); data processing, computer information systems (A.A.S.); business: secretarial science (A.A.S.); liberal arts and sciences/humanities and social science (A.A.), and individual studies (A.A, A.S., and A.A.S.) at that branch campus.

Approved by the Governor on 6/8/88.

**Adirondack Community College (7/29/88)**

Authorized Adirondack Community College to offer a program in food service leading to the degree of Associate in Applied Science (A.A.S.).

Approved by the Governor on 9/29/88.

**Niagara County Community College (1/21/87)**

Authorized State University to establish a certificate program in licensed practical nursing at the main campus of Niagara County Community College and at its off-campus locations in Medina, Niagara Falls, and Sanborn.

Approved by the Governor on 2/20/87.

**Onondaga Community College (6/17/88)**

Authorized State University to establish a program in physical therapy assistant leading to the degree of Associate in Applied Science (A.A.S.) at Onondaga Community College.

Approved by the governor on 8/9/88.

**Suffolk County Community College (1/20/88)**

Authorize State University to establish a program in electrical technology: electronics leading to the degree of Associate in Applied Science (A.A.S.) at the Western campus of Suffolk County Community College.

Approved by the Governor on 3/7/88.

## PROPRIETARY INSTITUTIONS

**The Briarcliffe School, Inc. (9/16/88)**

Authorized The Briarcliffe School, Inc., to confer the degree of Associate in Applied Science (A.A.S.) and to establish A.A.S. programs in business administration and office technologies.

**Bryant and Stratton Business Institute of Rochester (12/11/87)**

Authorized Bryant and Stratton Business Institute of Rochester to establish a program in electronic technology leading to the degree of Associate in Occupational Studies (A.O.S) at its Penn Can branch campus.

**Bryant and Stratton Business Institute of Syracuse (12/11/87)**

Authorized Bryant and Stratton Business Institute of Syracuse to establish a program in electronic technology leading to the degree of Associate in Occupational Studies (A.O.S.).

**Plaza Business Institute (9/16/88)**

Authorized Plaza Business Institute to confer the degree of Associate in Applied Science (A.A.S.) and to establish A.A.S. programs in collegiate secretarial and executive accounting/ management.

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